

Part II

EXECUTION

V.—PASSAGE

41. Organization of Assault Forces

The assault forces were organized as follows :—

Assault Group.	Headquarters.	Assault Troops.	Beach.	Remarks.
<i>Force "G"</i>				
	H.M.S. <i>Bulolo</i> { Commodore Douglas-Pennant. Maj.-Gen. Graham (50th (N) Div.). Gp. Capt. Simonds.			
G 1	H.M.S. <i>Nith</i> Capt. J. W. Farquhar, R.N. (S.O.A.G.G. 1). Brig. Sir A. Stanier, Bt. (231st Infy. Bde.).	231st Bde.	"Jig" Green	
G 2	H.M.S. <i>Kingsmill</i> Capt. F. A. Ballance, R.N. (S.O.A.G.G. 2). Brig. F. V. C. Knox (69th Infy. Bde.).	69th Bde.	"King" Green	
G 3	H.M.S. <i>Albrighton</i> Capt. G. V. M. Dolphin, R.N. (S.O.A.G.G. 3). Brig. R. H. Senior (151st Infy. Bde.).	151st Bde.		Reserve.
<i>Force "J"</i>				
	H.M.S. <i>Hilary</i> { Commodore G. N. Oliver. Lt.-Gen. C. J. Crocker (1st Corps). Maj.-Gen. Keller (3rd Can. Div.). Gp. Capt. R. Cleland.			
J 1	H.M.S. <i>Lawford</i> Capt. A. F. Pugsley, R.N. (S.O.A.G.J. 1). Brig. H. W. Foster (7th Can. Infy. Bde.).	7th Can. Bde.	"Mike" Green Red "Nan" Green	
J 2	H.M.S. <i>Waveney</i> Capt. R. J. O. Otway-Ruthven, R.N. (S.O.A.G.J. 2). Brig. K. G. Blackader (8th Can. Infy. Bde.).	8th Can. Bde.	"Nan" White Red	
J 3	H.M.S. <i>Royal Ulsterman</i> Capt. A. B. Fanshawe, R.N. Brig. D. G. Cunningham (9th Can. Infy. Bde.).	9th Can. Bde.	Probably "Nan" White Red	Reserve.

Assault Group.	Headquarters.	Assault Troops.	Beach.	Remarks.
<i>Force "S"</i>				
	H.M.S. <i>Largs</i> { Rear-Admiral A. G. Talbot. Maj.-Gen. R. G. Rennie (3rd Div.). Gp. Capt. W. G. Tailyour.			
S 1	H.M.S. <i>Locust</i> Capt. W. R. C. Leggatt, R.N. (S.O.A.G.S. 1 and N.O.I.C. "Sword"). Brig. J. C. Cunningham (9th Infy. Bde.).	9th Bde.		Reserve.
S 2	H.M.S. <i>Dacres</i> Capt. R. Gotto, R.N. (S.O.A.G.S. 2). Brig. K. P. Smith (185th Infy. Bde.).	185th Bde.		Intermediate Group.
S 3	H.M.S. <i>Goathland</i> Capt. E. W. Bush, R.N. (S.O.A.G.S. 3). Brig. E. E. Cass (8th Infy. Bde.).	8th Bde.	"Queen" White Red	Assault Group.
<i>Force "O"</i>				
	U.S.S. <i>Ancon</i> { Rear-Admiral J. L. Hall, U.S.N. Maj.-Gen. Huebner, U.S.A. (1st Div.). Col. L. N. Tindall, U.S.A. (9th Air Force and 9th Tactical Air Force).			
O 1	U.S. Transport <i>Samuel Chase</i> .. Capt. Fritzsche, U.S.C.G. ¹ (S.O.A.G.O. 1). <i>L.C.I. (L) 87</i> Capt. Imlay, U.S.C.G. (Dep. S.O.A.G.).	116th R.C.T.	"Fox" Green "Easy" Red	
O 2	U.S. Transport <i>Charles Carroll</i> .. Capt. Bailey, U.S.N. ¹ (S.O.A.G.O. 2). <i>L.C.I. (L) 86</i> Capt. Wright, U.S.N. (Dep. S.O.A.G.).	115th, 116th R.C.T.	"Easy" Green "Dog" Red White	
O 3	U.S. Transport <i>Anne Arundel</i> .. Capt. Schulten, U.S.N. ¹ (S.O.A.G.O. 3). <i>L.C.I. (L) 492</i> Commander Unger, U.S.C.G. (Dep. S.O.A.G.).	18th R.C.T.	"Fox" Green "Easy" Red	

¹On account of their relative seniority, the transport division Commanders were placed in command of the assault groups, with landing craft officers as their deputies. Rear-Admiral Hall subsequently remarked that this was undesirable because the transports completed their part of the operation at a comparatively early stage and left the assault area, taking with them the Assault Group Commanders, while the Deputy Assault Group Commanders remained throughout the assault, and the first three weeks of the build-up phase.

Sec. 41

OPERATION "NEPTUNE"

Assault Group.	Headquarters.	Assault Troops.	Beach.	Remarks.
<i>Force "O"—continued</i>				
O 4	H.M.S. <i>Prince Charles</i> Commander Dennis, R.N. .. (S.O.A.G.O. 4).	2nd Ranger Bn.	"Charlie" Pointe du Hoe "Dog" Green	
<i>Force "U"</i>				
	U.S.S. <i>Bayfield</i> { Rear-Admiral D. P. Moon, U.S.N. Maj.-Gen. Collins (VII Corps).			
Green	L.C.H. 530 Commander A. L. Warburton, U.S.N. (S.O.A.G.).	1st Bn. 8th Infy.	"Tare" Green	Initial landings followed by 1 Infy. Battn. on each beach at H+75 min., H+210 min., H+240 min., H+250 min., leaving 2 Battns. "on call."
	L.C.I. (L) 321 Commander J. S. Bresman, U.S.C.G. (Dep. S.O.A.G.).			
Red	L.C.H. 10 Commander E. W. Wilson, U.S.N.R. (S.O.A.G.).	2nd Bn. 8th Infy.	"Uncle" Red	
	L.C.I. (L) 217 Lt.-Com. R. G. Newbegin, U.S.N.R. (Dep. S.O.A.G.).			

For the passage, each British Assault Force was organized in 16 or 18 convoys or groups, the composition and numbering of the groups being based on the time of arrival at "the other side".¹ A programme was worked out in great detail, times of the sailings of the various convoys being adjusted to the widely varying speeds and seagoing capacities of the heterogeneous collection of shipping of which the assault forces were composed. The problem was not eased by the necessity for steaming dead across the Channel stream running at times up to $2\frac{1}{2}$ knots² and, in the event, the heavy weather conditions added a further complication.

The American Assault and Follow-up Force convoys were made up in accordance with arrival by tides. The composition of the convoys, which were usually larger than the British, was determined largely by the tactical plan, with the underlying idea of not exposing types which were valuable to the build-up until it was assured that they could be expeditiously and safely unloaded, e.g. only 15 L.S.T. were permitted to arrive off the U.S. beaches on the first tide. Owing to the variety of ships and craft, and the complex movements involved, the assault convoys were limited to two categories in accordance with speed capabilities, viz. :—

12 knots—fire-support ships, transports and L.C.I.(L).

5 knots—fire-support craft, L.S.T., L.C.T. and L.C.M. needed for the assault which could not be lifted.

L.S.T. were not put in a separate category as nearly all were engaged in towing rhino ferries and causeway sections during the assault phase.

¹ See App. "H."

² On the night of 5th/6th June, under the combined effect of wind and tidal streams some craft had to allow as much as 40° to make good the track desired.

Force "U" (Rear-Admiral Moon, U.S.N.) had perhaps the most difficult task of all the assault forces, as regards its organization and passage¹. The lack of a large port in the West Country area necessitated the use of nine different loading ports, and most of the twelve convoys in which its 865 ships were organized contained three or four sections which sailed from different ports and had to rendezvous at sea. The escorts, too, in most cases, were obliged to sail from different ports to their convoys. In addition, Force "U's" embarkation ports were considerably further from the assault area than those of the other assault forces, thus entailing greater fatigue and discomfort on the troops embarked and longer exposure to the hazards of the passage.

42. Departure

At 0900 5th June, the first groups of landing craft sailed from the Portsmouth area, and from then on there was a constant stream of ships passing the Needles and the Nab Tower. Force "G" proceeded through the Needles Channel: Force "J" and those portions of Force "S" in this area—Assault Groups "S1" and "S3"—used the Spithead and Lumps Fort entrances². The sailings of the assault forces from the crowded anchorages proceeded smoothly.

As the first convoy left Spithead the signal "Good Luck: Drive on" was hoisted in the *Largs*, Rear-Admiral Talbot's Flagship—which was anchored at the eastern end of the Force "S" line of L.S.T.—and kept flying until her own departure at 2145.

The wind was west, force 5, slackening to force 3 to 4 and veering to west-north-west in the evening; the sea was 4, swell 1. These conditions were unexpectedly severe and imposed a high test on the landing craft crews³. "Their spirit and seamanship alike rose to meet the greatness of this hour, and they pressed forward . . . in high heart and resolution; there was no faltering, and many of the smaller landing craft were driven on till they foundered⁴."

The reserve group of Force "S"—Assault Group "S2" (S.O. Captain Gotto, R.N.)—which sailed from Newhaven, had a steady beat of 33 miles

¹ The difficulties were enhanced by the fact that Force "U" was the last force to be formed. The craft assigned to it were the last to arrive in England, and in many cases had practically no training.

² The sailing of these convoys was witnessed by Admiral Ramsay during the afternoon, who embarked in a M.T.B. for the purpose, subsequently visiting Rear-Admiral Talbot and Commodore Oliver to wish them Godspeed.

³ Admiral Ramsay subsequently remarked: "That the decision of the Supreme Commander to launch the assaults under such conditions was the correct one has never been questioned. An unfortunate doctrine had, however, been given full promulgation during planning, particularly in Army circles, namely that fine weather and a calm sea were essential for the assault. In retrospect, with the experience of Operation 'Husky' still fresh in our minds, and with the knowledge of the fickleness of the weather in the Channel, this should never have been allowed." A.N.C.X.F. Report, Vol. 1, p. 57.

⁴ A.N.C.X.F. Report, Vol. 2, Report of N.C.E.T.F., p. 3.

Rear-Admiral Vian added: "It may probably be that the weather conditions had some part in what must ever be a matter for wonder that the embarkation, sailing and passage of the force by day should have been carried through without so great a movement being detected by a well-equipped, prepared and determined enemy. That this should have been achieved is a lasting tribute to the admirable work of the Allied Air Force and the excellence of the cover plan."

It is now known that the German meteorological officers had in fact informed the German Command that invasion would not be possible on the 5th or 6th June on account of stormy weather which was expected to last for several days. *But this is not entirely borne out by the German Naval records.*

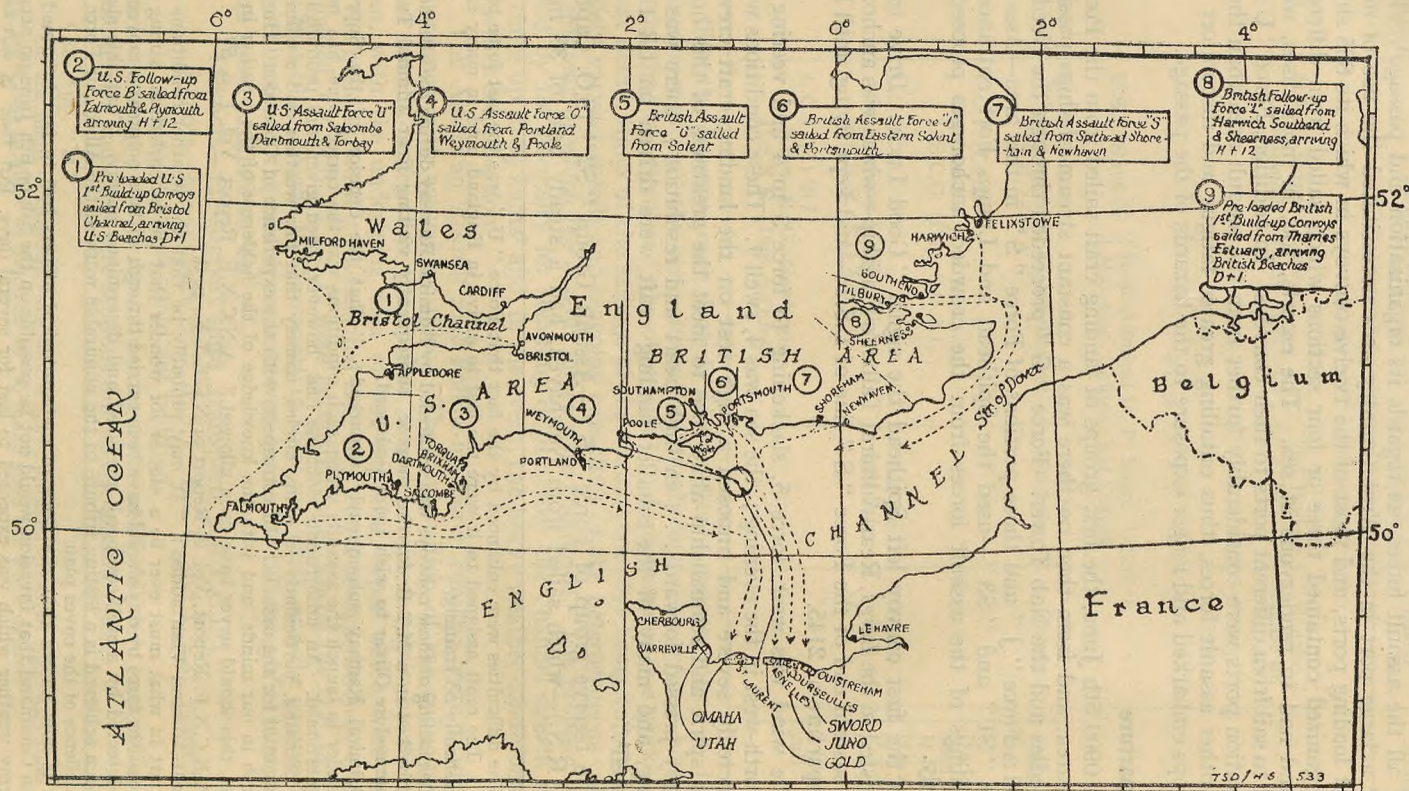


Fig. 12. Sailing of Assault and first Build-up Convoys.

into a head sea, and was hard put to it to keep to its programme. Similar difficulties, enhanced by a strong flood stream, were experienced by the landing craft of Force "G" in getting clear of the Needles.

At 1630, 5th June, H.M.S. *Scylla* wearing the flag of Rear-Admiral Sir Philip Vian sailed and closed various groups of landing craft in the vicinity of position "Z." Once the groups had turned to the southward, it appeared that the major landing craft would not have serious difficulty in keeping to their time table, but conditions were much harder for the L.C.P.(L) and L.C.A.(H.R.) which were in company or being towed.

Meanwhile the Western Task Force also had put to sea.

Force "O" assault forces sailed from the Portland-Poole area, Rear-Admiral Hall, with his flag in U.S.S. *Ancon*, sailing at 1600, and joining his bombarding ships to the southward of St. Albans Head.

The leading groups of Assault Forces "S," "G," "J" and "O" arrived in area "Z" without incident during the afternoon and headed for the entrances to the channels across the German mine barrier.

Rear-Admiral Moon, with his flag in U.S.S. *Bayfield*, left Portland at 0930, and steered for the entrance to Channels 1 and 2, being joined *en route* by the sections of Force "U" from the West Country ports and his bombarding ships from Belfast. Group "U.2A," as already mentioned, had been disorganized by the heavy weather of the day before, and severe strain was thrown on the commanding officers, some of whom were on their bridges continuously for 70 hours before H-hour, but out of 128 L.C.T. of this group, only seven failed to take part in the assault¹.

As already mentioned (*see* Sec. 39) mines had been found the day before to the southward of St. Catherine's Point in Force "U's" route². The Senior Officer, 14th Minesweeping Flotilla, acting on his own initiative, swept and buoyed a channel through this dangerous area, cutting one mine, while the 16th Flotilla cut four mines some miles to the westward. Force "U" passed safely through this minefield, but it claimed the first casualty of the operation, U.S.S. *Osprey* of the U.S. 7th Minesweeping Squadron, which hit a mine and subsequently sank.

43. Sweeping of Approach Channels

The minesweeping operations in the meantime were going almost exactly to plan in spite of stronger tidal streams than had been expected and the unfavourable weather. They were completely disregarded by the enemy, despite the fact that the 14th Minesweeping Flotilla was in sight of the French coast from 1957³, 5th June and before dark could distinguish individual houses ashore⁴.

¹ "At one time it was thought that Force 'U' would have to return to Devonshire to re-form, but when it was pointed out that this would almost certainly result in the postponement of the operation to the next moon period, Rear-Admiral Kirk, with characteristic verve, announced his readiness to proceed." A.N.C.X.F. Report, Vol. 1, p. 9.

² Admiral Ramsay appreciated that these mines were a chance lay, jettisoned by E-boats, and decided not to attempt to change the route of Force "U."

³ Sunset, 5th June, 2212 M.S.T.

⁴ Some anxiety had been felt lest the appearance of the minesweepers in daylight should compromise security, but the risk had to be accepted.

Sec. 43-44

OPERATION "NEPTUNE"

The fleet minesweepers were preceded by minesweeping motor launches; the latter had great difficulty in working their sweeps in the prevailing weather, but all except two were successful¹.

The change of sweeps on the turn of the tide was successfully accomplished by all flotillas, though the 9th and 18th Flotillas were obliged to execute the manoeuvre in a minefield.

The danlayers proved equal to their task and the marking of the channels was very good throughout. The entrances of channels 9 and 10 were about a mile to the eastward of their correct positions, but these channels came in to their right geographical positions at the southern end.

Throughout the approach of the flotillas, positions were checked by the Q.M. and Q.H. radar systems, as well as by taut wire measuring gear. All flotillas laid their terminal buoys within a cable of the correct positions and within a few minutes of the planned time.

Between Lat. 49° 38' N. and Lat. 49° 29' N., 29 mines were cut by the 14th, 18th and 9th Flotillas in channels 2, 6 and 7.

44. Passage of the Mine Barrier

(Plan 4)

The assault forces found little difficulty, generally speaking, in locating the entrances of the swept channels. A few mistakes naturally occurred, but these were of no great moment. For example, four groups of Force "J" and one of Force "S" proceeded down the wrong channels, all to the westward of their correct ones, without serious inconvenience to the proper users. These errors were realized before reaching the end of the channels, but the loss of time involved in making to the eastward could not, in the case of the L.C.T. (A.V.R.E.) of Assault Group "J1," be made up. The leading group of Assault Group "G1," which should have used channel 5, was jostled out of it and to the eastward by a group belonging to Force "O," whose tail had drifted downwind and tide. After midnight the tide turned, the tail wagged the other way and the leading group of "G1" was able to enter its correct channel, only to be forced out of it again by overtaking infantry landing ships and light cruisers; this group only spent one hour in swept waters.

Divergences such as the foregoing were only to be expected in view of the difficulty in the navigation of slow-moving craft in a cross stream, accentuated by heavy weather.

Casualties on passage were almost entirely due to the weather, only two being caused by enemy action—H.M.S. *Wrestler*², which was mined at 0645 6th June, in Lat. 49° 36' N., while a cable to the eastward of channel No. 7—

¹ Rear-Admiral Vian subsequently remarked that the loss of speed and cutting power imposed by the inclusion of M.S./M.L.S. was justified by the sweeping of two mines ahead of the leading Fleet minesweeper in Channel No. 7. A.N.C.X.F. Report, Vol. 2, Report by N.C.E.T.F., p. 5.

² "H.M.S. *Wrestler* had done useful service during the night in rounding up stragglers and guiding stray groups into the correct channels. The Commanding Officer had appreciated that the importance of the punctual arrival of these groups outweighed the risk to his ship by operating in unswept waters." Commodore Oliver's report, A.N.C.X.F. Report, Vol. 3, p. 4.

and later on one L.S.T. of Follow-up Force "L." The total casualties on passage in the Eastern Task Force are shown in the following table :—

Ship or Craft.	Force "S"	Force "J"	Force "G"	Force "L"	
H.M.S. <i>Wrestler</i> ..	—	—	—	—	Mined.
L.S.T.	—	—	—	1	Mined.
L.C.T.	—	1	—	—	Sank in tow.
	—	—	2	—	Missing.
	1	1	3	—	Broke down.
M.G.B.	—	1	—	—	Broke down.
Rhino Ferry ..	1	1	1	—	Sank on passage.
Rhino Tugs ..	7	7	3	—	Sank on passage.
L.C.P. (L) ..	1	—	1	—	Missing.
L.C.A. (H.R.) ..	8	8	7	—	12 sank in tow ; 2 missing ; 2 broke down and towed to base.

The total casualties suffered on passage by the Western Task Force are not known ; such as occurred were due to the weather. Several L.C.P.(L) of Assault Force "O," which were being towed, had to be cast adrift and abandoned and two L.C.T.(A) foundered, the crews being recovered in all cases.

45. Diversions

(Plan 4)

While the assault forces were making their uncomfortable way to the southward, to east and west of the assault area diversions had been in progress since midnight. Their primary object was to delay the movement by the enemy of his military reserves to meet the invading forces. It was also thought possible that the diversionary forces might draw off enemy naval opposition from the assault and follow-up forces.

The diversions were carried out by coastal craft forces fitted with special equipment, which approached suitable beaches and simulated landings by means of radio counter-measures and smoke ; they were supported by air sorties.

Six H.D.M.L.s acting under the orders of the Vice-Admiral, Dover, operated in the Pas de Calais area, feinting at suitable beaches at approximately the time of the real assault (Operation "Glimmer") ; eight H.D.M.L.s under the orders of the Commander-in-Chief, Portsmouth, manœuvred on a 14-mile front to seaward of Cap d'Antifer so that the flank ships arrived off the beaches at Bruneval and Fécamp half an hour before civil twilight¹, (Operation "Taxable"), and to the west four H.D.M.L.s under the Naval Commander, Force "U," operated some 6 miles east of Cape Barfleur from about 0230 till 0440 to occupy the attention of the enemy radar stations in the north-east Cotentin (Operation "Big Drum").

46. Arrival at Lowering Positions

(Plan 1B)

Meanwhile at Battle Headquarters first reports were eagerly awaited. "There was an air of unreality during the passage of the assault forces across the Channel"—to quote Admiral Ramsay—"curiously similar to that on

¹ Start of Civil Twilight, 0510 M.S.T., 6th June.

D-1 in 'Husky' as our forces approached Sicily. The achievement of strategical surprise was always hoped for in 'Neptune' but was by no means certain, whereas that of tactical surprise had always seemed extremely unlikely. As our forces approached the French coast without a murmur from the enemy or from their own radio, the realization that once again almost complete tactical surprise had been achieved slowly dawned¹."

This was indeed the case.

Across the Channel at the headquarters of Admiral Krancke, the German Commander of "Group Command West," nothing unusual occurred on this momentous night till 0130, 6th June, when paratroop landings east of the Orne were reported². This was not considered likely to portend a large scale landing, but as a precaution all forces under F.O.I.C., Western Defences, and S.O., Motor Torpedo Boats, were brought to immediate notice³. An hour and a half went by; then, at 0309, ten large craft were reported seven miles north of Port en Bessin. This, in conjunction with amplifying reports of the airborne landings, convinced Admiral Krancke that a large scale operation was in progress, and the following orders were issued:—

- (i) Vessels of West Defence Force to patrol coastal waters.
- (ii) "Landwirt" submarines⁴ to be in immediate readiness.
- (iii) 8th Destroyer Flotilla (Narviks) to move from Royan to Brest.
- (iv) 5th Torpedo Boat Flotilla from Le Havre to reconnoitre in Port en Bessin-Grandcamp area. This was later changed to the Orne estuary (see Sec. 48).
- (v) 5th and 9th Motor Torpedo Boat Flotillas from Cherbourg to patrol off Cape Barfleur and west of Cape de la Hague respectively⁵.

But it was too late.

As the assault forces neared the French coast, signs of the Allied bombing became visible; there was considerable flak over the land and many fires were seen well alight. All the assault forces reached their lowering positions as planned, the American Forces "O" and "U" some three hours before the British, since their landings were to take place about an hour earlier and their

¹ Admiral Ramsay went on to remark: "This astonishing feat cannot be explained by any single factor and must be attributed in part to all of the following: the cover and deception plan; the high degree of air superiority attained by our Air Forces, which drastically reduced the enemy's air reconnaissance; the bad weather which caused the enemy to withdraw his E-Boat patrols to Cherbourg, and finally the radio counter measures employed by our forces, which, coupled with the diversions against the Pas de Calais and Cap d'Antifer, left the enemy in doubt as to the points at which we would land even when he had become aware that the invasion was in progress." A.N.C.X.F. Report, Vol. 1, p. 10.

² At about 0050, 6th June, the Supreme Commander, West, stated that during 5th June reports stating that the invasion would be launched very shortly were broadcast by the B.B.C. Admiral Krancke remarked that "although it is hardly to be assumed that the invasion will be announced in advance over the radio" such announcements should cause acts of sabotage, etc., which would pave the way for the invasion proper.

³ The normal surface patrols had been kept in harbour on the night of 5th/6th June on account of weather.

⁴ A group of 36 submarines based on the west coast of France earmarked for use against the invasion.

⁵ These flotillas left Cherbourg at 0445, but bad weather compelled them to return at first light.

lowering positions (transport areas) were further from the beaches¹. U.S.S. *Bayfield* (Naval Commander, Force "U") anchored at 0229 and U.S.S. *Ancon* (Naval Commander, Force "O") at 0251, closely followed by their leading convoys, and the disembarkation of the troops into L.C.V.P.s commenced at once.

In the Eastern Task Force area, Forces "G" and "J" arrived at the lowering positions without the slightest molestation, the *Bulolo* (Naval Commander, Force "G") and leading L.S.I.s anchoring at about 0535, and the *Hilary* (Naval Commander, Force "J") at 0558. The only opposition at this stage consisted of a torpedo attack on Force "S," which developed from the eastern flank just as the leading ships were arriving at the lowering position. This attack, as well as the conditions obtaining at the time, is best described in the words of Rear-Admiral Talbot's report.

47. German Torpedo Attack on Eastern Flank.

(Plan 1B)

"As H.M.S. *Largs*, bringing up the rear of the L.S.I. convoy, approached the coast of France, the sense that we had achieved a large measure of tactical surprise became apparent. No air attacks, no E-Boat attacks, no radar or W/T jamming worth mentioning. The air plot showed enemy aircraft on patrol away to the eastward in the Pas de Calais area. A glance to starboard showed the assault convoys on time as far as could be judged. The operation was proceeding with unreal precision. . . .

As we approached the lowering position, H.M.S. *Warspite*, H.M.S. *Ramillies*, H.M.S. *Roberts* and H.M.S. *Arethusa* were already anchored in their bombarding positions to port of us, down the extension of channel 10 swept by the 40th Minesweeping Flotilla, H.M.S. *Scylla*, H.M.S. *Mauritius*, H.M.S. *Danae*, O.R.P. *Dragon* and H.M.S. *Frobisher* disposed at anchor along the swept "Loop" channel joining the lowering position to the southern extremity of channel 10 extension. The bombarding squadron had opened fire, but were only being engaged by the enemy in a desultory fashion, few shots falling anywhere near them. The bombarding destroyers, under the command of Captain (D) 23rd Flotilla (Captain P. G. L. Cazalet, D.S.C., Royal Navy), in H.M.S. *Saumarez* were waiting, as ordered, clear of the swept channels where they merged, to be swept into their inshore positions by the 165th B.Y.M.S. The "DD" L.C.T. convoy was just coming up to the lowering position—on time, but the L.C.T.(A) convoy was obviously late. Such was the picture at 0510 as we ran down from the knuckle to join channel 9.

Then events started to move swiftly. In accordance with plan, our own aircraft streaked low across the eastern flank at about this time and laid a most effective smoke screen to shield the force from the heavy batteries at Havre. Unfortunately, three German torpedo boats took advantage of this to carry out a torpedo attack, and though engaged by the bombarding squadron,

¹ In choosing the lowering positions (U.S. "Transport Areas") it had been necessary to balance the conflicting factors of being south of the mine barrier and outside the range of enemy shore batteries. The Eastern Task Force finally chose positions 7 to 8 miles from the beaches, whilst the Western Task Force placed them 10 to 11 miles out.

In the event, the L.S.I. of the E.T.F. were not seriously menaced by enemy fire, but the longer passage inshore in the rough weather seemed to add appreciably to the difficulties of the assault craft of the W.T.F.

Admiral Ramsay subsequently remarked that it was unfortunate that the Americans did not anchor closer in: "although one can fully sympathise with the decisions of the U.S. Forces . . . it is considered that immunity from coastal batteries should not be given undue weight in the selection of the lowering positions, especially when adequate naval counter battery fire is available." A.N.C.X.F. Report, Vol. 1, p. 58.

were able to make good their escape in the smoke¹. Two torpedoes passed between H.M.S. *Warspite* and H.M.S. *Ramillies* and at 0530 one hit H. Nor. M.S. *Svenner* close on the port beam of H.M.S. *Largs*. Another torpedo was seen approaching H.M.S. *Largs*; her engines were put emergency full astern and the torpedo passed a few feet ahead of her. It then came to rest and sank just short of H.M.S. *Virago*. She had, however, seen H. Nor. M.S. *Svenner*'s signal "Torpedo Port" and with the remainder of the starboard division of bombarding destroyers, waiting stopped in a group, went emergency full ahead². The *Svenner* had apparently been hit immediately under her boiler room. There was a burst of steam amidships and her funnel fell aft as the whole ship lifted out of the water. She broke her back and sank rapidly; the greater part of her ship's company were picked up.

The *Warspite* followed the enemy in by radar and opened fire at 14,000 yards; she reported one torpedo boat sunk. The *Mauritius*, *Ramillies* and *Arethusa* also opened fire, the former claiming one trawler sunk and one damaged³.

After this mauvais quart d'heure things quietened down; the L.S.I. of Force "S" anchored in the lowering positions in accordance with plan, and the convoys began to arrive⁴.

The fire from the enemy's coast defence batteries was singularly ineffective. In "Gold" area Longues battery opened fire on the *Bulolo* at 0557; no hits were obtained, and the battery was silenced by the *Ajax* by 0620⁵. The two main batteries opposing Force "J" were neutralized during the assault and subsequently captured before they could interfere with the shipping. In "Sword" area the fire from the batteries east of the Orne was directed mainly against the bombarding ships; the *Warspite* shifted berth after being straddled by shells from the Benerville battery, but received no damage⁶. By 0930 the main enemy batteries had been silenced, though they required periodic attention throughout the day; the *Ramillies*, for example, carried out eleven shoots at

¹ Rear-Admiral Vian subsequently remarked that the fact that it was not possible to stop the aircraft from laying smoke probably enabled the German torpedo boats (who were accompanied by trawlers) to make their escape, and recommended that in future direct communication between smoke laying aircraft and the unit being screened should be arranged.

² A.N.C.X.F. Report, Vol. 2, Report of N.C. Force "S," pp. 15, 16.

³ The attack was carried out by the 5th Torpedo Boat Flotilla, 15 torpedoes in all being fired. According to the Germans, only minor damage was sustained by the torpedo boats; but the 15th Patrol Flotilla, stationed off Havre, "ran into heavy enemy fire" under which one vessel sank after striking a mine.

⁴ Rear-Admiral Talbot remarked that it was a pleasant surprise that the congestion anticipated with such large numbers of ships—minesweepers, destroyers, L.S.I. anchored or waiting in the lowering position, and the steady stream of landing craft steaming in two columns, one either side of the L.S.I.—was no problem at all.

⁵ This battery came to life again later and was engaged by the *Argonaut*. It was subsequently found that two guns had been put out of action by direct hits with 6-in. shell through the embrasures. These hits must be attributed to chance, since the density of craters around the guns was not high. The remaining two guns were undamaged, though in one case the casemate had been hit. In all, 150 rounds of 6-in. (*Ajax*) and 29 rounds of 5.25-in. (*Argonaut*) were fired at Longues battery.

⁶ Rear-Admiral Sir Philip Vian remarked: "The inability of the enemy on the eastern flank to find or hold the range may have been due to the radar counter measures, which included "window" and R.C.M. balloons . . . planted in clumps to the north-eastward of the bombarding ships. Some of these balloons were seen to be engaged by shore batteries." A.N.C.X.F. Report, Vol. 2. Report by the Naval Commander, Eastern Task Force, p. 7.

Benerville with considerable observed success. The cruisers of Force "D" fired on the batteries assigned to them as occasion demanded. As the day wore on the beaches and anchorage were subjected to an increasing fire from mobile guns in the woods south of Franceville which proved most difficult to locate and engage.

48. Deployment of Assault Forces

(Plans 1C, 5, 6, 6A, 7)

Meanwhile the assaulting flotillas had started on their passage to the beaches. The weather at the lowering position—wind west-north-west, force 4, with a short steep sea—somewhat impeded the lowering and loading of the landing craft, but despite this the "marriage" of the minor craft from the L.S.I. with their various major craft was completed successfully, and in general the flotillas got away on time.

The detailed organization of the assault groups varied in the several assault forces, depending as it did on the type of assault intended, the physical characteristics of the beaches, the nature of the defences and so forth. A typical organization (based on the orders for Force "S") is shown diagrammatically in Plan 5.

Destroyers proceeded in on the flanks of the first wave of the assaults, giving direct close support fire, while B.Y.M.S. swept the waters ahead of them. The "Hunts" closed the beaches as near as possible, while the "Fleets" anchored between three and four thousand yards to seaward. Prearranged targets were engaged accurately and effectively till the leading craft had touched down, after which fire was shifted to strong points on the flanks and inland as opportunity offered. In "Sword" area, Rear-Admiral Sir Philip Vian in the *Scylla*—after engaging prearranged targets in Ouistreham till 0705—closed to within 5,500 yards of the beach and intensified the fire on the beach defences till a minute before the touch down.

The deployment and approach of the flotillas was admittedly not conducted with the precision of the later rehearsals. The weather allowed craft but little margin of speed to adjust the errors of timing which had inevitably crept in during the night passage; nevertheless, the landings all took place within 15 minutes of the scheduled times¹ and, except in "Utah" area, at the correct positions on the beaches, which in most cases were identified without difficulty². In areas "Sword" and "Juno" the lights of submarines X.23 and X.20—which had up to that time spent 64 hours dived out of 76 hours at sea—were readily picked up by the approaching flotillas and provided a useful check on their position.

The leading groups approached the beaches unopposed until about 3,000 yards off shore. Even then fire was desultory and inaccurate, except in "Sword" area, where landing craft sustained damage from mortar fire.

¹An exception was the Ranger landing at Pointe du Hoe which was 35 minutes late owing to an error of the control vessel in mistaking Raz de la Perce for Pointe du Hoe (see Section 52, *postea*).

²Specialist hydrographic teams in L.C.P. (Sy) and U.S. Scout teams in L.C.S. were provided to assist the leading headquarters landing craft.

VI.—THE ASSAULT

49. General Narrative.

(Plans 1B, 1C)

From the naval point of view the assault was carried out in every main essential exactly as planned. Contrary to expectation, tactical surprise was achieved in every sector save one, thereby greatly easing the problem of getting ashore. This phase of the operation was further facilitated by the strange immunity enjoyed by the Allied shipping lying in the anchorages from interference either by coastal batteries or air attack¹.

To this extent the operation proved easier than had been expected, but it would be a great mistake to suppose on that account that the assaults were easy or unopposed landings. The enemy troops manning the coast defence batteries may have been of inferior quality, but there was no doubt as to the quality of the field troops manning the various strong points and the mobile field batteries which dominated the beaches. These put up a most stubborn resistance; their fire, in combination with a heavy surf on the beaches and extensive obstacles, called for endurance and seamanship of the highest order in the handling of the landing craft, and the exits from the beaches were only secured by the assaulting troops after a desperate struggle².

The weather conditions were on the border line for "swimming" "DD" tanks³; the decisions as to launching them varied in different sectors, but in all cases they arrived on shore late and after the first landing craft had touched down⁴. After beaching, they met with varying success; for example, in the "Sword" and "Utah" areas they were of great value, on "Omaha" beaches they were quickly knocked out⁵.

¹ This immunity was attributed to the numbing blow of the pre-H-hour bombardment, Allied superiority in the air, counter battery fire and perhaps in part to the poor quality of the enemy troops manning the coast defences.

² Admiral Ramsay subsequently remarked that there was nothing but praise in the Reports of the Task and Assault Force Commanders "for the courage and devotion to duty on the part of the landing craft crews, just as the greatest admiration has been expressed by both navies for the magnificent bearing of the assaulting troops whom they put ashore. In short, the assault proceeded according to plan not necessarily because it was a good plan, but because every single individual taking part had confidence in it and was determined to achieve his objective." A.N.C.X.F. Report, Vol. 1, p. 56.

³ Rear-Admiral Hall remarked that "the so-called 'Secret Weapon' of the invasion forces, the 'DD' tank, was no secret at all, except possibly to our own personnel. A captured document . . . by General Rommel . . . warned the defenders that when the invasion came the Allies would use all sorts of weapons, including an amphibious tank that actually would float with its body beneath the surface." A.N.C.X.F. Report, Vol. 1. Report by N.C., Force "O3," p. 73.

Force "U"	..	Launched and landed successfully; reached shore H+20 mins.
Force "O"	..	Left flank: launched 6,000 yards off shore; all but two or three foundered. Right flank: landed on beach; quickly put out of action by enemy fire.
Force "G"	..	Landed on beach just after L.C.T. (Avre).
Force "J"	..	Group J.2: landed on beach with L.C.T. (Avre). Group J.2: launched 1,500 yards from shore; reached shore 15 minutes later (6 minutes after infantry).
Force "S"	..	Launched 5,000 yards off shore; 31 out of 40 reached shore 12 minutes late, and did valuable work.

⁵ "It has to be admitted that conditions could not have been less ideal for this novel weapon, but even so the consensus of naval opinion is that ordinary water-proofed tanks, landed on the beach in the normal manner, would have served the purpose equally well. Had the assault been conducted at dusk or in low visibility, on the other hand, "DD" tanks might have achieved a valuable surprise." A.N.C.X.F. Report, Vol. 1, p. 58.

The initial landings were made by the Americans in the western area at about 0630, the British landings in the eastern area following about an hour to an hour and a half later.

On most beaches obstacle clearance presented greater difficulties than had been anticipated. The weather preceding D-day had tended to build-up the tide, and the surf and the large number of landing craft arriving on the beaches prevented work in the water. Except on the "Utah" beaches but little clearance could be effected during the initial assaults. Major craft smashed their way through the obstacles at high speed, while the L.C.A. threaded their way between them¹.

By the end of the forenoon all the beaches in the eastern area had been secured with the exception of one in "Gold" area, and the landing of the assault and reserve brigades other than elements arriving in L.S.T. had been completed by about 1500². The first of the return convoys of empty landing craft were sailed from Area "Juno" at about 1300 and from them onwards there was a steady stream of landing craft sailing from all areas³.

In the western area Force "U" met with little opposition, but owing to a variety of causes, in the "Omaha" area the assaulting troops were pinned to the beaches for nearly seven hours and it was not until 1400 that the position was stabilized.

Some account of how each assault force fared will be found in the ensuing sections, starting with Force "U" and working from west to east.

50. Western Task Force : Force "U"⁴

(Plans 1B, 1C)

In the western area the assaults in general went according to plan, but whereas in "Omaha" area the task proved far more difficult than had been expected, in "Utah" area it proved considerably easier. This was partly due to relatively quiet weather under the lee of the Cotentin Peninsula and partly to the comparative feebleness of the enemy opposition.

Force "U's" general scheme was to land on a two-battalion front, the initial landings being carried out at H-hour (0630) by "DD" tanks and the 1st Battalion 8th Infantry on "Tare" Green beach and the 2nd Battalion 8th Infantry on "Uncle" Red beach. Succeeding waves were to follow as closely as beaching conditions permitted. In the event, the first landings were made at 0635—five minutes late on the planned time.

¹ As soon as the tide started to fall, about 1330, and uncover the obstacles, beach clearance proceeded rapidly, and by midnight all sections of the beaches in use had been cleared.

² To achieve this a number of L.C.T. had to be dried out as there was no room for their vehicles until the tide started to fall.

³ No L.S.T. were sailed till the following day (7th June).

⁴ Force "U"

Rear-Admiral Moon, U.S.N., Flag in H.Q. ship U.S.S. *Bayfield*.

<i>Bombarding Force "A"</i>		<i>Destroyers.</i>	<i>Support Craft.</i>
<i>Nevada, Quincy, Erebus,</i>		<i>Fitch, Corry, Forrest,</i>	4 L.C.G. (L)
<i>Hawkins, Tuscaloosa, Soemba,</i>		<i>Hobson, Herndon, Shub-</i>	4 L.C.F.
<i>Black Prince, Enterprise.</i>		<i>rick, Butler, Gherardi.</i>	5 L.C.T. (R)
			8 L.C.T. (A).

L.S. and L.C. embarking troops of 7th U.S. Corps.

At the outset, Rangers attacked the St. Marcouf Islands, which from their position—some four miles off shore and about 3,000 yards on the flank of the approach route—could have greatly impeded the main landings had they been stoutly defended. Fortunately there was no opposition and both islands were speedily occupied.

The assault flotillas left the transport anchorage fairly punctually, but the L.C.T. carrying the "DD" tanks were delayed by the weather and did not reach the transport area till 0445—half an hour after they should have left it¹.

The boatlane ran right across a minefield which had been laid on Cardonnet Bank. Preliminary sweeping failed to detect it, but later many mines came to life and to them were due most of the naval losses².

The trip inshore, though only lightly opposed, was not without incident. At about 0555, when some 7,000–8,000 yards from the shore, the primary control craft for Red beach—P.C. 1261—was sunk by an explosion. A few shells were falling in the water at the time and it may have been due either to a chance hit or a mine. The secondary control craft for this beach had not accompanied the flotilla, having fouled her screw in the transport area and the Red beach flotilla was consequently without a guide. Shortly afterwards an L.C.T. bound for Green beach was sunk in a similar manner. The primary control craft, Green beach, continued inshore and the secondary control craft, Green beach, was ordered to lead all the L.C.T. in. As the shell-fire was not heavy, the L.C.T. held on 2,000 yards nearer the beach than had been planned and launched their "DD" tanks at 3,000 yards, which touched down at 0650. "These supported the infantry with marked success"³.

The shore was much obscured by smoke and haze, and this, together with the absence of two out of the four control craft, caused the landings to be made about 1,000–1,500 yards to the south-east of the correct positions. This error, which might have been most serious, proved fortunate, since both obstacles and land defences at the actual landing places were less advanced and easier to deal with than those at the beaches originally chosen.

The landings were practically unopposed. Small arms fire was not encountered on the beaches, but there was occasional inaccurate artillery fire from distant batteries. Rapid progress was made by the troops and by 0745 St. Martin de Varreville was in American hands. Meanwhile Army and Navy demolition teams, landing with the second and fourth waves, had little difficulty in removing the beach obstacles, most of which were exposed, as it still wanted three hours to high water.

Disembarkation continued steadily throughout the day. There was no undue congestion in the water. The beaches were crowded, but the sand was firm and excellent for traction; good exits were rapidly established and there

¹ The "DD" tanks made up some time during the passage inshore, and touched down 10 minutes after the first wave of L.C.V.P.—20 minutes late on scheduled time. Rear-Admiral Moon remarked that precise timing of "DD" tanks was so uncertain that no reliance was placed on their ability to land at any specified time; this was allowed for in the assault briefing. A.N.C.X.F. Report, Vol. 3. Report by N.C., Force "U," p. 23.

² In the course of the whole operation, a total of 124 ground mines and 77 moored mines—apparently of acoustic magnetic type with delayed mechanism—were detonated or cut in this field.

³ A.N.C.X.F. Report, Vol. 3. Report of N.C., "Force "U," p. 23.

was no appreciable delay in beach clearance. About 1100 the enemy intensified his long-range artillery fire on the beach and inflicted some casualties, but this had little effect in slowing up the operations¹.

Naval losses throughout the day were remarkably light. The destroyer *Corry* struck a mine at 0710 and sank 25 minutes later, her place in the fire support area being taken by the *Butler*. The only other losses suffered by Force "U" on D-day were P.C. 1261, three L.C.T. and one L.C.F., all probably mined.

Major-General Barton with the staff of the 4th U.S. Division landed at 1400 and set up his headquarters on shore, and by 1800, D-day, 21,328 troops, 1,742 vehicles and 1,695 tons of stores had been landed in "Utah" area.

51. Western Task Force : Force "O"².

(Plans 1B, 1C)

In marked contrast to their countrymen in "Utah" area, Force "O" had perhaps the most difficult task of any of the assault forces. The pre-H-hour air bombardment failed to find its target; the beaches, on which heavy surf was breaking, had many natural defensive qualities, few exits and more than their share of obstructions, and on landing the assault forces found themselves opposed by a field division, alert and waiting, which had been carrying out manoeuvres in the neighbourhood.

The initial landings were as follows :—

After 40 minutes naval bombardment of pre-selected targets, the 16th Regimental Combat Team (R.C.T.) attacked on the left on beaches "Fox" Green and "Easy" Red, with two battalions in assault and one following. The 116th Regimental Combat Team attacked in similar strength on the right, landing on "Easy" Green, "Dog" Red, White and Green beaches. Nine of the 12 companies of the 2nd and 5th Ranger Battalions landed on beach "Dog" Green, while the remaining three companies landed on Pointe du Hoe in sector "Charlie" to capture the battery reported there, which threatened the transport anchorage and both "Utah" and "Omaha" beaches³.

¹ Rear-Admiral Moon subsequently remarked: "Intelligence indicated extremely heavy enemy defences against landings on "Utah" beach. The 28 batteries defending "Utah" beach consisted of 111 guns of medium to heavy calibre. Information obtained from air reconnaissance indicated that at least 75 per cent. of these guns were effective at the time of the assault despite extensive pre-D-day bombing. Examination of captured batteries indicates that approximately 50 per cent. of the guns were still operational after capture. The neutralization of these formidable batteries by the bombardment group was so effective that these batteries offered little opposition to either the assault or follow-up. As a result all landings of troops, equipment and supplies were accomplished with minor losses." A.N.C.X.F. Report, Vol. 3. Report by N.C., Assault Force "U," p. 4.

² Force "O"

Rear-Admiral Hall, U.S.N., Flag in H.Q. ship *Ancon*.

Bombarding Force "C"

Texas (Flag R.A. C. F. Bryant), Arkansas, Glasgow, Montcalm (Flag R.A. Jaujard), Georges Leygues.

Destroyers.

Frankford, McCook, Carmick, Doyle, Endicott, Baldwin, Harding, Satterlee, Thompson, Tanat-side, Talybont, Melbreak.

Support Craft.

5 L.C.G. (L), 7 L.C.F., 9 L.C.T. (R), 8 L.C.T.A., 8 L.C.T. (H.E.).

L.S. and L.C. embarking of V U.S. Corps.

³ After the position was captured it was found that the guns had been removed about 1,000 yards to the southward and placed along a thickly arbour'd lane, completely hidden from air reconnaissance.

Sec. 51

OPERATION "NEPTUNE"

The landings on the "Omaha" beaches were to be preceded by tanks and supported by naval gunfire by destroyers and support craft close inshore, as well as fire from the tanks embarked in L.C.T.(A), S.P. Artillery and Rockets.

The following extracts from the report by the Naval Commander, Force "O"¹ give an account of the battle for "Omaha" beach:—

"The weather . . . was unfavourable" wrote Rear-Admiral Hall, "but landing operations were possible. The sea was choppy, with wind force 5 from the south-west. The sky was partially overcast with visibility about 10 miles The trip of the L.C.V.P.s from the transport area 10 miles offshore into the line of departure in the face of fresh wind and choppy sea was neither easy nor pleasant. Nevertheless, they arrived at the line of departure in fairly good order. Due to the darkness and confusion in the transport area the L.C.T. with 'DD' tanks, the L.C.T.(A)s and the L.C.M.s with demolition parties straggled considerably in their approach toward the line of departure. Two L.C.T.(A)s foundered before reaching the transport area. One L.C.T.(A) strayed to the Force 'U' area and did not return until several hours later. Two more L.C.T.(A)s had gone so far to the eastward that they could not get back in time for their part in the initial assault wave. Thus, five of the 16 L.C.T.(A)s scheduled for the first wave were missing.

The pre-landing naval bombardment was carried out in accordance with the plan, but the air bombardment scheduled for delivery on the 'Omaha' beaches between H—30 minutes and H-hour did not materialize for reasons unknown to the Force Commander. Its absence was felt severely when the landing commenced. During the naval bombardment the enemy made no reply of any kind. Several competent observers have stated that during this entire period only one shot was fired from the enemy batteries ashore and this missed.

The order of landing of the first four waves on all beaches was—'DD' tanks between H—10 and H—5 minutes; L.C.T.(A)s carrying tanks and tank dozers for obstacle clearance at H-hour; a wave of infantry at H+1 minute; and demolition parties at H+3 minutes. 'DD' tanks were to be launched from the L.C.T.s in which they were embarked approximately 6,000 yards off shore unless weather conditions prohibited, and were to proceed in to their assigned beaches from that point under their own power. The decision whether to launch at 6,000 yards or to close the beaches was left to the senior army tank officer and senior naval officer in the L.C.T.s of the two assault groups. Those on the left flank in Assault Group 'O1,' preceding the 16th R.C.T., were launched as planned. The sea conditions, however, were such that all but two or three of them foundered before they reached the shore. The responsible officers on the right gauged the sea conditions more accurately and took their L.C.T.s in to a point where the 'DD' tanks grounded as soon as they were launched. Therefore, all the 'DD' tanks preceding the assault troops of the 116th R.C.T. reached the shore.

¹ A.N.C.X.F. Report, Vol. 3, Report by N.C., Force "O", pp. 6, 7.

Referring to this report, Admiral Ramsay subsequently remarked: "It is strongly recommended that those planning a daylight assault in future should study the admirable description of what occurred on this beach." A.N.C.X.F. Report, Vol. 1, p. 60.

Information is not available as to the exact time of landing or the order of landing waves on all of the beaches. The first landings on 'Easy Red' and 'Dog Green' were made at 0635 and it is believed that the leading waves landed on the other beaches at approximately the same time. Due to the state of the sea, the loss of the 'DD' tanks, the absence of five L.C.T.(A)s and damage to others by enemy gunfire, the order of landing was somewhat mixed. Simultaneously with the landing and the cessation of the naval gunfire bombardment, the enemy commenced firing. This fire from artillery, mortars, machine guns and small arms was heavy and accurate and casualties were numerous. Many of the tanks which had reached the shore line were knocked out and losses to the infantry advancing shoreward through the obstacles, and to the demolition parties trying to clear lanes through them, were severe. A considerable portion of the equipment of the demolition parties was lost in the landing due to the surf. The limited time for working on the obstacles before they were covered by the rapidly rising tide and the devastating effect of the defensive fire further reduced the effectiveness of the demolition parties. Only five gaps were cleared all the way into the beach and three part way in, instead of the 16 planned. Most of these were inadequately marked. The result was that during the high tide immediately following the assault the only opening through the obstacles that was in use for a considerable period was one lane on 'Easy Red' beach.

At the request of the Commanding General, V Corps, the Commander, Assault Group 'O2', was directed at H-hour to land troops of the 115th R.C.T. at H+4 hours. Thus, all the landing force embarked in Force 'O' were committed from the beginning of the assault. After the initial waves, landing continued throughout the forenoon and afternoon of D-day. Due to the failure of the demolition parties to clear and mark gaps through the underwater obstacles, and to the heavy enemy fire, great difficulty was experienced in getting anyone or anything ashore. Some craft carrying infantry and elements of the shore party managed to land their personnel, but the bulk of the craft proceeding shoreward was stopped between the seaward row of obstacles and the line of departure. With the strong tide, fresh wind and choppy sea this soon resulted in a mass of craft in which all semblance of wave organization was lost until the Deputy Assault Group Commanders arrived on the scene, took charge of the situation, moved the craft to seaward to give them more room, and reformed the waves as best they could. In the meanwhile, most of the tanks which had reached shore had been knocked out by enemy artillery fire or by mines, or were caught in the obstacles and flooded by the rising tide, and the personnel, both the assault troops and the shore party, were pinned down on the beaches just above high water by enemy fire; few, if any, troops actually crossed the beach during the early hours of the forenoon. The supporting destroyers¹ and gunfire support craft stood in as close to the beach as

¹ U.S.S.s *Carmick*, *Doyle*, *McCook*, *Thompson*, *Frankford*, *Harding*, *Emmons*, *Baldwin*, H.M.S.s *Melbreak*, *Talybont*, *Tanatside*. Their fire was directed partly from the ships and partly from Shore Fire Control Parties which had managed to set up communications. Rear-Admiral Hall remarked: "Too much credit cannot be given to the destroyers which participated in this bombardment. Lacking complete knowledge of their own troops' positions and hard pressed to pick out enemy positions, they closed in some cases to within 800 yards of the beach It is certain that they destroyed many of the enemy positions." A.N.C.X.F. Report, Vol. 3. Report of N.C., Force "O", p. 56.

the depth of the water would allow and engaged all the defensive installations which they could locate. Despite this, however, little progress had been made prior to 1100 when there was still considerable machine-gun fire, sniping, artillery and mortar fire on the beaches between the exits, and opposite the exits the condition was critical. A number of enemy strong points on the beach were still holding out and our troops were not able to move inland.

The first encouraging news came at 1100 from a message to Commander, Transport Division 3, intercepted by the Force Commander, to the effect that German defenders were leaving their posts and surrendering to U.S. troops. Shortly after that another message from a member of the V Corps Staff embarked in a D.U.K.W. near the shore line stated that the troops were advancing up the western slope of the exit from Sector 'Easy.' By 1340 the beaches of Sectors 'Easy' and 'Dog' were clear of opposition, except for artillery and mortar fire

Landing of personnel and vehicles from transports and L.S.T. continued throughout the afternoon of D-day. During this time the beaches were subject to enemy artillery and mortar fire, which, while neither heavy nor sustained, was deadly accurate. The fire was obviously observed because enemy batteries would be silent until craft beached, when there would be a few quick salvos, usually right on the target. This artillery fire caused considerable loss and was doubly disturbing because neither enemy observers nor batteries could be located. In fact, repeated requests for U.S. vessels to cease firing on the beaches were made by personnel ashore and observers to seaward, who thought that it was our own ships firing into our own troops. Actually no U.S. ships were firing at the times the requests were made, and when they did fire they were firing at targets inland rather than on the beach.

About 1430, Commander Force 'B,' with Convoy 'B.2,' consisting principally of L.C.I.(L)s and *Oceanway*, stood into the assault area. Anchorages close to the beaches were assigned to this convoy¹ By 1530 advance elements of the First Division and Twenty-ninth Division Staffs were setting up command posts ashore near the beach exits from Sectors 'Easy' and 'Dog' respectively, and St. Laurent was partially occupied in addition to the capture of Colleville At 1715 the Commanding General, First Division and his Staff left the *Ancon* to establish their headquarters on the beach. By 1730, except for sniping and the recurring artillery and mortar fire, hostile action against the beach area had ceased and the work of organizing the beaches for further unloading was progressing in orderly fashion."

52. Ranger Landing at Pointe du Hoe

While the main assault formations of Force "O" were waging their desperate struggle on "Omaha" beaches, the three Ranger Companies (2nd Ranger Infantry Battalion) found themselves in a precarious position on Pointe du Hoe.

¹ The sweeping of the transport area and channels inshore as far as the 10 fathom line had been completed early in the forenoon, but in view of their prospective early departure, the transports then in the area had not been ordered to shift nearer the shore, as the interruption to unloading would on the whole have lost time.

After preliminary bombing from the air the battery had been bombarded by the battleship *Texas*, but the naval bombardment had ceased (as planned) at H-5 minutes (0625)¹. As already mentioned (Sec. 48 *ante*) the landing took place some 35 minutes late and this allowed the enemy to recover from the bombardment and to man their positions. The Rangers got ashore at 0705; their ropes had got wet and many rockets failed to carry over the cliff. Men scrambled up by those ropes which had anchored and as best they could under heavy fire from machine-guns and snipers, and a constant rain of grenades.

The U.S. destroyer *Satterlee*, which had been engaging targets in the vicinity until 0645, closed to within 1,500 yards of the beach and engaged the enemy on the cliff tops with direct fire obtaining good results. Eventually the Rangers gained the top and fought through to the Vierville-Grandcamp Road, where they established a defence line. There they held out, hotly assailed by enemy reinforcements and entirely isolated, except for the gunfire support of the *Satterlee* and later the *Thompson*, *Harding* and *Barton*; it was not until D+2 (8th June) that the position was stabilized².

53. Eastern Task Force : Force "G"³.

(Plans 1B, 1C, 8)

"Gold" area—the western area of the British Assault area—extended from Port en Bessin to the mouth of the River de Provence. It was divided into four sectors, the two eastern-most—"Jig" and "King"—being chosen for the initial assaults. Port en Bessin and the western sectors were to be dealt with later.

H-hour for Force "G" was 0725—55 minutes after the planned time of the American assault in "Omaha" sector to the westward and 10 minutes before that of Force "J's" assault to the eastward. Assault Group "G1"

¹ It was subsequently found that air and naval bombardment had destroyed one A.A. and three 155-mm. gun emplacements, as well as one 155-mm. gun. The other guns had been withdrawn prior to D-day; this new position was bombarded and knocked out by the *Texas* using air spotting in the morning of D-day.

² The Commanding Officer, U.S.S. *Texas*, regretted that, owing to lack of visual communication with the Rangers, he had not known of their plight at H-hour. Had he done so, the enemy could have been kept down by gunfire until the Rangers had scaled the cliff and over-run the area. The Commanding Officer U.S.S. *Satterlee*, also remarked: "We should never have eased up enough to allow the enemy time enough to get out of their hiding places. This mistake can be attributed to two causes: lack of experience of the Commanding Officer in actual shore bombardment and over confidence in the effectiveness of the air bombardment."

The U.S. naval staff drew the provisional lesson that "naval gunfire support should conform to the movement of the landing boats rather than adhere to a pre-determined time schedule." U.S.S. Secret publication, Cominch P-006, June, 1944 (contained in M.012017/44).

This point had been emphasized by Rear-Admiral Vian prior to the operation, who directed that "fire is not to be checked or shifted at the pre-arranged time of touch down, unless the craft have, in fact, arrived at the beach." Oneast 8, para. 16.

³ Force "G"

Commodore Douglas-Pennant, Broad Pendant in H.Q. ship H.M.S. *Bulolo*.

Bombarding
Force "K"

Destroyers.

Support Craft.

Orion, *Ajax*, *Argonaut*, *Emerald*, *Flores*.

Grenville, *Ursa*, *Ulster*, *Undaunted*,
Urchin, *Jervis*, *Undine*, *Cattistock*,
Urania, *Ulysses*, *Pythley*, *Cottes-*
more, *Krakowiak*.

3 L.C.G. (L), 8 L.C.T. (R),
4 L.C.S. (L), 7 L.C.F., 3
Regts. S.P. Artillery 16
L.C.T. (A).

L.S.-and L.C. with troops of 30th Corps; 50th British Infantry Division Assaulting.

commanded by Captain Farquhar, R.N. in H.M.S. *Nith* landed the 231st Infantry Brigade (Brig. Sir A. Stanier, Bt.) on "Jig" Green beach, east of Asnelles, and Group "G2" commanded by Captain Ballance, R.N., in H.M.S. *Kingsmill* the 69th Infantry Brigade (Brig. Knox) on beaches "King" Red and Green, opposite Ver-sur-Mer. Following them, Group "G3" commanded by Acting Captain G. V. N. Dolphin, R.N. in H.M.S. *Albrighton* carried the reserve, consisting of the 56th Infantry Brigade (Brig. Pepper) and the 151st Infantry Brigade (Brig. Senior). The decision as to when and where the reserve brigades should land was retained by the G.O.C., Northumbrian Division embarked in H.M.S. *Bulolo*.

The timing of the assaults in both sectors was extremely accurate¹. Both Deputy S.O.A.G.s, in consultation with the military officers embarked, decided that the weather was too rough for the successful launching of their "DD" tanks² and their L.C.T.s were beached just after the L.C.T. (A.V.R.E.). The obstacle clearance units were thus the first to set foot on shore, where they worked for a time virtually unsupported. The obstacles were considerably thicker and heavier than had been expected and the tide was higher; in consequence, little clearance could be effected at this time.

Considerable damage to landing craft was sustained from mines fixed at the top and bottom of posts. In addition, there was reluctance in the heat of the assault to use Kedge anchors, and this in the surf, caused many craft to broach, fill with water and so encumber the beaches.

Strong resistance was met with at Le Hamel and La Riviere, both of which had enfilading positions covering the beaches. The former kept up its fire on "Jig" sector till late afternoon and it was not until about 1600, after a concentrated close range bombardment by L.C.G., L.C.F. and destroyers that the village was captured by the 1st Hants, attacking from the west³.

No. 47 R.M. Commando landed on "Jig" sector at 0930 and in doing so lost all but two of their L.C.A. and much equipment including all their wireless sets. This did not deter them from achieving their object—the capture of Port en Bessin—but all contact was lost with them till the afternoon of the following day.

Shortly before the landing of No. 47 Commando, the *Scylla*, wearing the flag of the Naval Commander, Eastern Task Force, arrived in "Gold" area. After giving direct support to the assault in "Sword" area, Admiral Vian had proceeded along the front keeping about two miles from the shore in order to judge the progress of the landings. Finding fighting on the "Gold" beaches

¹ Commodore Douglas-Pennant gives high credit for this achievement after so difficult a passage to the Senior Officers of the various groups.

² Commodore Douglas-Pennant fully concurred with this decision.

³ Four factors favoured the resistance of this powerful position :—

- (a) The 75 tons of bombs planned to be dropped on it fell in fields 3,000 yards south; very low cloud caused this failure.
- (b) The 147th Field Regiment of S.P. Artillery were to fire on this target, but both their navigational M.L. and control L.C.T. fell astern due to weather; their fire was therefore concentrated with that of the regiment on their left, one M.L. controlling both, leaving Le Hamel unfired at.
- (c) Le Hamel was engaged by three destroyers, but the enemy positions were protected against low trajectory fire from seaward.
- (d) No calls for fire were received from the 1st Bn. Hampshire Regiment which was attacking the position, owing to the first and second in command becoming casualties soon after landing.

still going on, the *Scylla* fired 40 rounds at Arromanches at a range of about 8,000 yards between 0924 and 0931, being herself intermittently, and ineffectually, engaged by shore batteries; she then returned to the eastward and anchored in "Sword" area.

The reserve brigades were sent in at 1050 and 1120, and the G.O.C. of the Division landed at 1205. Later in the day the G.O.C. 30th Corps arrived in the *Beagle* and boarded the *Bulolo* about 1900. He went ashore later in an L.C.V.(P), though there was a heavy sea then running in the anchorage.

54. Eastern Task Force : Force "J"¹

(Plans 1B, 1C, 7, 9)

Force "J" operating in "Juno" area to the east of Force "G," attacked in sectors "Mike" and "Nan" in the neighbourhood of Courseulles, Group "J1" (Captain Pugsley, R.N., in H.M.S. *Lawford*) landing the 7th Canadian Infantry Brigade on the three western beaches ("Mike" Green and Red, and "Nan" Green) and Group "J2" (Captain Otway-Ruthven, R.N., in H.M.S. *Waveney*) the 8th Canadian Infantry Brigade on "Nan" White and Red beaches. Group "J3" (Captain Fanshawe, R.N., in H.M.S. *Royal Ulsterman*) followed with the reserves consisting of the 9th Canadian Brigade.

In order to ensure clearance over the outlying rocks of "Nan" sector², H-hour for Group "J2" had been fixed as 20 minutes later than for Assault Forces "G" and "S"; for Group "J1" it was 10 minutes earlier than for Group "J2." Owing to the heavy weather and to several groups using the wrong channels (*see* Sec. 44 *ante*) the Assault Group Commanders found it necessary to retard these times by 10 minutes, bringing them to 0755 and 0745 respectively. As a result of these progressive postponements the assault craft beached amongst the obstacles instead of short of them. Despite strenuous efforts by the obstacle clearance units, clearance of the outer obstacles³ was not practicable until the tide had fallen and considerable loss or damage was sustained from them and from the "Teller" mines, etc., attached to them. Nevertheless, the landing of the assault brigades was achieved with relatively light casualties, "thanks to the determination shown by commanding officers and coxswains of craft, to the clockwork precision of the supporting fire from H.M. ships, S.P. artillery, rocket craft, etc., and to the unexpectedly feeble effort of the enemy coast and beach defences⁴."

¹ Force "J"

Commodore G. N. Oliver, Broad Pendant in H.Q. ship H.M.S. *Hilary*.

Bombarding Force "E."

Destroyers.

Support Craft.

Belfast (Flag R.A.	Kempfenfelt, Faulknor, Venus,	7 L.C.G. (L), 8 L.C.T. (R),
Dalrymple-Hamilton),	Fury, Vigilant, Bleasdale, Algonquin, Glaisdale, Sioux, Stevenstone,	6 L.C.S. (L), 6 L.C.F., 4
Diadem.	La Combattante.	Regts. S. P. Artillery, 8
		L.C.T. (A), 8 L.C.T. (H.E.).

L.S. and L.C. with troops of 1st Corps; 3rd Canadian Infantry Division and No. 48 R.M. Commando assaulting.

² At a fairly late stage in the planning these rocks were reported to dry at 5 feet instead of 3 feet as previously supposed. Actually the original estimate proved to be more accurate.

³ Fortunately the obstacles on these beaches were less formidable and more widely spaced than had been expected, and did not impede the beaching of landing craft to any serious extent. Most of the losses occurred during retraction after the initial landings.

⁴ A.N.C.X.F. Report, Vol. 2. Report by N.C., Force "J," p. 6.

Submarine X.20 successfully marked the launching position for the "DD" tanks and provided a useful check on the positions of the leading flotillas¹. Actually, so far as the "DD" tanks were concerned she was not needed as the Deputy S.O.A.G.s of both groups decided not to attempt to "swim" the "DD" tanks in the existing weather and to beach them in their L.C.T.s with the A.V.R.E. groups. This was adhered to by Group "J2" where the A.V.R.E. touched down at 0805, followed by the infantry at 0811 and the "DD" tanks a few minutes later, but in Group "J1," the Senior Officer of the "DD" tank group revised his decision and launched them about 1,000 yards from the beach. Some confusion ensued and they touched down between 0759 and 0810; the A.V.R.E.—which had gone astray in the night (*see* Sec. 44)—arrived six minutes after the infantry, 30 minutes late on their deferred time².

Very little shooting apart from some inaccurate mortar fire was directed on craft before the touch down. On the left on Group "J2's" beaches, it was not until the L.C.A.(H.R.) had fired their bombs that the defences began to shoot at the craft. The opposition encountered on the beaches was moderate to heavy and included shell and mortar fire, close range weapons and small arms fire. Generally speaking opposition was heaviest in the centre on "Mike" Red and "Nan" Green beaches. Sniping from the dunes and from buildings and churches close inshore continued throughout D-day and the night of D/D+1.

Great credit is given by Commodore Oliver to the work of the bombarding forces, which proceeded "in complete accordance with the assault fire plan³."

The batteries at Beny-sur-Mer and behind "Nan" White were engaged by the *Diadem* and *Kempfenfelt*. On the right the destroyers *Venus*, *Faulknor*, *Fury*, *Stevenstone* and *La Combattante* engaged beach sector targets on "Mike" and "Nan" Green with direct fire at ranges down to 3,000 yards; on the left "Nan" White and Red beaches were similarly dealt with by the *Vigilant*, *Algonquin*, *Sioux*, *Bleasdale* and *Glaisdale*.

Seven L.C.G. (mounting 14—4·7-in. guns between them) and eight L.C. Flak, gave close support with direct fire on the beaches at ranges down to 1,000 yards, while four regiments of S.P. Artillery (who "overcame the difficult weather conditions and carried out their shoots with remarkable accuracy³") engaged prearranged strong point targets from ranges between 9,000 and 1,000 yards during the run in; these strong points were finally engaged by eight L.C.T. Rockets—four per brigade front—during the touch down; the rocket craft all covered their targets well. Unfortunately, a passing Typhoon met a pattern in mid-air and was destroyed.

Nine L.C.A.(H.R.) were assigned to each assault group. Of those belonging to Group "J1" all except one foundered or had to be cut adrift, apparently through being towed at too great a speed in the prevailing weather. On the left, all nine L.C.A.(H.R.) of Group "J2" reached their firing positions on time—a "fine performance³."

To return to the beaches.

¹ X.20 later closed the *Hilary* by whom she was cheered at 0910, and was then towed back to Portsmouth by the trawler *Dartheima* as planned without incident.

² S.O.A.G. 1 was ordered by the Force Commander (after consultation with the G.O.C.) not to wait for the A.V.R.E.

³ A.N.C.X.F. Report, Vol. 2. Report by N.C., Force "J," p. 7.

At about 0830 (H+45), No. 48 R.M. Commando had landed on "Nan" Red from L.C.I.(S), whose wooden hulls suffered widespread damage from the beach obstacles by this time mostly submerged. Heavy casualties were suffered by the Commando from machine-gun and mortar fire, as the assaulting infantry had passed straight through the beach without pausing to mop up, and some of the defences sited to give cross-fire were then beginning to come to life again.

Though the infantry had got across the beaches quickly, there was some delay before exits were established. At 0941 "Mike" Red reported that the landing of the 7th Brigades' vehicles was held up by lack of exits and flooding inland; gradually one exit was got working satisfactorily by 1112. The 8th Brigade had less difficulty; the seawall was bridged on "Nan" White at 0850 and though congestion occurred periodically, two exits were in use on "Nan" Red and three on "Nan" White by 1040.

An hour later (1140) the N.O.I.C. "Juno" (Captain Maud, R.N.) landed on "Nan" Green beach and set up his advanced headquarters close east of Courseulles at about 1330. Advanced beach signal stations had been established promptly after the landings and were functioning efficiently¹.

By 1100, the leading army elements were reported to be half-way to the divisional intermediate objectives; 20 minutes later the 8th Brigade reported that Tailleville, Banville and St. Croix-sur-Mer had been captured and that they were advancing. No. 48 R.M. Commando had by this time taken the Langrune coastal strip.

The first craft of the reserve brigade group beached on "Nan" White and Red at 1133 and by 1150 the 9th Canadian Infantry Brigade was on shore.

The G.O.C. 3rd Canadian Infantry Division, landed on "Nan" White beach at 1310, and the landing of second flight troops from the L.S.I. had been completed by 1400.

The first 12 L.S.T. had arrived at 1120 with the good news that all Rhinos had survived the bad towing conditions on passage², but no beaches were ready to receive them till 1445. A limited number of L.C.T. started discharging where gaps existed in the beach obstacles at noon. Most of the beaches were heavily littered with stranded landing craft, but a flow of discharge could be maintained. At 1500 the D.S.O.A.G., "Mike" Red, decided to beach the maximum possible number of L.C.T. on the falling tide and leave them to dry out; these had finished unloading by 1615.

At 1715 H.M.S. *Hilary* and other ships and craft shifted inshore and took up berths in accordance with the pre-arranged berthing plan (*see* Plan 9). At the same time, the Naval Commander, Eastern Task Force—who had been touring the beaches in a U.S. coastguard cutter during the afternoon—arrived in the *Scylla* and anchored in "Juno" area in order to be centrally placed for a meeting of Flag Officers and Commodores which took place at 1800³. The *Scylla* remained in "Juno" area till 2200, when she returned to "Sword" area for the night.

¹ The times at which these stations were reported in action were:—

0823, "Mike" Green.

0831, "Mike" Red, "Nan" Green.

1004, "Nan" Red.

0850, "Nan" White.

² The next group of L.S.T. to arrive (Group 333 at 1615) were not so fortunate, losing 7 tugs out of 11 and 1 Rhino out of 3 on passage.

³ A meeting of Flag Officers and Commodores was held daily throughout the operation at 1800, unless otherwise ordered.

Sec. 54-55

OPERATION "NEPTUNE"

Group "L1" of follow-up Force "L" with a further 13 L.S.T.¹ carrying the 51st (H) Division and 21st Army Group Headquarters, H.M.S. *Northway*, loaded with D.U.K.W.S., and four pre-loaded stores coasters had arrived as planned during the afternoon, but in spite of the growing accumulation of vessels, there was no sign of enemy air activity—apart from a few "Red" warnings—and in fact no air action took place over "Juno" area till 0150, next morning (7th June).

55. Eastern Task Force : Force "S"²

(Plans 1B, 1C, 6, 6A)

"Sword" area—the easternmost in the British assault area—had been considered the most vulnerable to enemy attack, both from the heavy batteries in the vicinity of Havre and from light craft based on that port. For this reason very powerful bombarding forces had been stationed on its eastern flank. Actually, these forebodings proved groundless in the early stages; "beyond the loss of H. Nor. M.S. *Svenner* and one L.C.I.(S), which was hit by shell fire and blazing from stem to stern, the opening stages of the assault were unbelievably unopposed. The air was full of our bombers and fighters and the noise and smoke of our bombardment. The enemy was obviously stunned by the sheer weight of support we were meting out"³.

The assault by Force "S" differed from the other assaults in that the 3rd Division was landed on a one brigade front, whereas in the cases of Forces "J" and "G" each division was landed on a two brigade front. The points chosen for the assault were in "Queen" sector, north-east of Colleville-sur-Orne.

Assault Group "S3" under Captain Bush, R.N., in H.M.S. *Goathland* was responsible for the initial landing of the 8th Infantry Brigade (Brig. Cass) on beaches "Queen" White and Red. Group "S2" (Captain Gotto, R.N., in H.M.S. *Dacres*)—the intermediate group—with the 185th Infantry Brigade (Brig. Smith) closely followed Group "S3," and Group "S1" (Captain Leggatt, R.N., in H.M.S. *Locust*) with the 9th Brigade (Brig. Cunningham) formed the reserve.

Weather conditions were recognized as being unsuitable for swimming "DD" tanks, but it was decided to launch them at 5,000 yards⁴. This decision was justified by events: of the 40 tanks embarked, 34 were successfully launched⁵.

¹ U.S.L.S.T. 981 had been mined on passage some eight hours previously, and left behind.

² Force "S"

Rear-Admiral Talbot, Flag in H.Q. ship H.M.S. *Largs*.

Bombarding Force "D."	Destroyers.	Support Craft.
<i>Mauritius</i> (Flag R.A. Paterson), <i>Warspite</i> , <i>Ramillies</i> , <i>Roberts</i> , <i>Arethusa</i> , <i>Frobisher</i> , <i>Dragon</i> , <i>Danae</i> .	<i>Saumarez</i> , <i>Kelvin</i> , <i>Scourge</i> , <i>Virago</i> , <i>Scorpion</i> , <i>Verulam</i> , <i>Swift</i> , <i>Middleton</i> , <i>Serapis</i> , <i>Eglinton</i> , <i>Svenner</i> , <i>Slazak</i> , <i>Stord</i> .	3 L.C.G. (L), 5 L.C.T. (R), 3 L.C.S. (L), 4 L.C.F., 8 Regts. S.P. Artillery, 8 L.C.T. (A).

L.S. and L.C. with troops of 1st Corps; 3rd British Infantry Division and Commandos assaulting.

³ A.N.C.X.F. Report, Vol. 3. Report by N.C., Force "S," p. 16.

⁴ Rear-Admiral Talbot expressed the opinion that "the courageous decision to launch these tanks and their gallant swim will be found to have been a decisive factor in the success of the assault." A.N.C.X.F. Report, Vol. 2, Report of N.C., Force "S," p. 18.

⁵ The leading tank in L.C.T. 467 slewed in its tracks and tore the canvas surround. It was accordingly decided to beach the L.C.T. Rear Admiral Talbot regretted that the damaged tank was not jettisoned and the remainder launched, since "the main function of the 'DD' tank is to provide close support fire at H-hour and immediately after it." These "DD" tanks did not get ashore till 0805, thereby depriving the Army of the fire of four guns at the most critical period of the assaults.

Two sank immediately and one was rammed by an overtaking L.C.T. (A.V.R.E.); the remaining 31 "DD.s" touched down at about 0730 and did valuable work. Many of these had their engines swamped as their trim changed on beaching, but they maintained their fire until the rising tide drowned them, when the crews took to their dinghies and paddled ashore. It is estimated that the "DD" tanks knocked out three or four 75-mm. guns, four or five 50-mm. and many 20-mm. These guns were completely defiladed from the sea, and destroyers were reporting them as neutralized or destroyed—since no flashes were visible—"while in fact they were very much alive and only waiting for the first craft on which they could bear. . . . Aimed fire from enemy guns actually on the beaches, other than sniping from houses, is reported to have ceased by H+20 (0745)¹." Brigadier Prior-Palmer, commanding 27th Armoured Brigade, who was in the headquarters craft of the leading group of Assault Group "S3," reported that 23 of the "DD" tanks survived the beach battle.

The L.C.T. (A.V.R.E.) reduced speed to avoid over-running the "DD" tanks, but they were almost immediately ordered by Captain Bush to proceed through them, and reach the beach just after H-hour (0725); all the A.V.R.E. tanks were landed by 0730, with the exception of those in L.C.T. 947 in which one flail was hit by a mortar shell which detonated the bangalore torpedoes which it carried, killing Lieut.-Col. A. D. Cocks, the Commander of the 5th Assault Regiment R.E., and putting two other tanks out of action.

The infantry touched down within five minutes of the A.V.R.E. Opposition was slight and all troops were landed in knee deep water at the correct place and with few casualties.

The obstacles were much as had been expected, and in general consisted of:—

- (a) Two staggered rows of hedgehogs, 150 yards from the back of the beach.
- (b) Two irregular rows of stakes, 200 yards from the back of the beach.
- (c) Clusters of ramps, 250 yards from the back of the beach.

Teller mines or shells were attached to all of the above. These devices were not as great an obstacle to the assault as had been anticipated but "they most certainly would have been if all craft had not been . . . instructed to drive their craft in at full speed for the last mile of approach²."

The L.C.T.(A) and L.C.T.(C.B.) had been late in leaving the lowering position, but made up time on the run in, and touched down on the flanks only five minutes after H-hour. Their tanks were landed successfully and expeditiously, but two L.C.T.(A) on Red beach were so severely hit that they became total losses. All craft fired in support during the final approach; no opposition was met till about 3,000 yards from the beaches, when those on the eastern flank came under fairly heavy mortar and machine gun fire.

Only one L.C.T. hedgerow survived the passage; she hit the beach almost immediately after firing her outfit, and her commanding officer reported that her pattern extended right up the beach, setting fire to one of the houses behind it.

¹ A.N.C.X.F. Report, Vol. 2, Report by N.C., Force "S," p. 18.

² A.N.C.X.F. Report, Vol. 2, Report by N.C. Force "S," p. 21.

On the beaches, considerable opposition was encountered, particularly by the East Yorks on Red beach. At 0750 the Free French and No. 4 Commandos touched down; these suffered casualties from anti-tank guns and mortar fire before they got ashore. By 0906 two exits had been secured on White beach, but there was considerable congestion due to shelling, wrecked vehicles and soft sand. The landing, however, was going well and the last groups of the assault brigade touched down at 0943—only 18 minutes late on schedule. The intermediate brigade followed; but the last groups of the reserve brigade had to be held up to seaward for about three hours while the congestion on the beaches was dealt with and did not get ashore till about 1600.

Meanwhile the landing craft had suffered considerably. Although Captain Bush was able to report at 1153 "only seven major craft destroyed so far" a much greater number was crippled and "only got off by dint of grim determination and good seamanship. Indeed, the spirit in which these crews endeavoured to save their damaged craft in great difficulties of weather, obstacles, mines, mortar fire and crowded foreshores makes good reading. Many were caught by the tide and dried out but they continued firing their guns at snipers in the houses and at enemy planes which were now beginning to bomb and strafe the beaches in sneak raids through the low clouds¹." Those craft that succeeded in unbeaching stood by those less fortunate and a large number was hauled off, thanks to this devotion to duty².

At 0930 H.M.S. *Largs* had shifted berth close inshore and at 1535 Rear-Admiral Talbot landed to see for himself how things were going. As he set foot on shore, seven Ju.88 attacked the beaches; mortar fire was continuous. More than 24 major landing craft were stranded. There was still much congestion at the beach exits—mainly caused by traffic blocks in the Ouistreham-Lion-sur-Mer lateral road at the back of the beaches; the resulting lack of transport had brought the unloading of ammunition from four dried out stores L.C.T. to a standstill. The Admiral remarked that "people were obviously rather dazed and shaken. They were also very exhausted. But the N.O.I.C. (Captain Leggatt, R.N.) and the Commander 101 Beach Sub-Area (Colonel Montgomery) who had landed at H+4 (1125) were competing bravely³."

On his return to the *Largs*, Rear-Admiral Talbot arranged for Commander T. I. S. Bell, at that time Naval Commander, Operations "Frog" and "Deer"⁴ to become Chief Principal Beachmaster, and for Fleet working parties to be sent ashore the following day to assist in clearing up the beaches.

Shortly before 2100, 6th June, the first 300 troop-carriers and towed gliders, lifting reinforcements to the 6th Airborne Division started coming over Area "Sword" and landing on the right bank of the Orne some four miles south Ouistreham. A further large contingent flew over some 20 minutes later—"a most impressive spectacle."

¹ A.N.C.X.F. Report, Vol. 2, Report by N.C. Force "S," p. 22.

² Admiral Ramsay subsequently remarked: "All Naval Commanders have remarked that some form of shallow draught tug to clear damaged craft from the beaches is a very urgent need. . . ." A.N.C.X.F. Report, Vol. 1, p. 59.

³ Assistant Beachmasters and their parties had landed with the Assault Infantry at H-hour, and suffered proportionately heavy casualties. The D.N.O.I.C. (Acting Commander Nicholl) who landed shortly afterwards was also wounded.

⁴ Operations "Frog" and "Deer" were Commando landings designed to destroy the battery at Houlgate or Benerville along the coast to the east of the Orne. Neither battery, however, had given any sign of life since early morning, and as the weather was unsuitable for re-embarking the Commandos on that part of the coast, both operations were cancelled about 2030, 6th June.

At 2250 orders were given to smoke out the anchorage in anticipation of a dusk air attack, which in fact developed half an hour later. Most unfortunately this attack occurred immediately prior to the arrival of the third and last wave of airborne troops. Here was precisely the contingency foreseen by Admiral Ramsay (*see ante* Sec. 16). Light ack-ack ashore opened up on some of the transport planes; certain merchant ships and L.S.T. in the anchorage joined in and, despite repeated signals to cease fire, at least two of the British aircraft were shot down.

The Flagship of the Naval Commander, Eastern Task Force, which was at anchor in "Sword" area at the time, was herself involved in this incident. Admiral Vian records that at one moment a Ju.88 passed down the side of the *Scylla* at masthead height; two minutes later two Dakotas passed over at 1,000 ft. Visibility was good with a full moon and fortunately they were recognized; but on the request of the Naval Commander, Eastern Task Force airborne operations of this nature were in future confined to daylight hours¹.

56. Fighter Cover to Assault and Shipping Areas

Mention has already been made of the unexpected immunity from enemy air attack enjoyed by the assault forces. A brief account follows of the measures taken by the Allied Expeditionary Air Force² to bring about this happy result.

Commencing at 0430, 6th June, and throughout the daylight hours of the assault period, a continuous fighter cover was maintained at nine squadron strength over the whole assault area. Of this force, six Spitfire squadrons provided low cover and three Thunderbolt squadrons high cover. One Spitfire squadron patrolled over each of the two American beaches, with a third on the western flank; two more covered the length of the British beaches, with one on the eastern flank. One Thunderbolt squadron was disposed centrally over each task force area, and the third between the two areas, but 8-10 miles inland from the beaches, whence it could readily reinforce any particular area, or engage enemy aircraft approaching the beaches from the southward³.

A continuous patrol over the shipping lanes and assault forces was maintained throughout daylight hours by four squadrons of Lightnings, each of 16 aircraft. They operated normally at between 3,000 and 5,000 ft., or just below cloud base, in four distinct areas⁴.

¹ A.N.X.C.F. Report, Vol. 2, Report of N.C.E.T.F., pp. 20, 21.

² In addition, the air effort from D-day onwards included the following activities not so directly concerned with the naval side of the operation :—

Attacks on enemy communications.

Close support of operations.

Attacks on coastal garrisons.

Attacks on German Air Force and its bases.

Operations of 1st Allied Airborne Army.

Defence against flying bombs and sites.

Strategical bombing.

Attacks on naval targets including surface craft and submarines.

³ This scale was maintained, whenever the weather permitted, until 13th June (D+7), when the force was reduced to three low cover and two high cover squadrons. All these squadrons were operated from England. In addition, a reserve of two squadrons from those by that time operating on the Continent was kept in readiness for extra low cover, if required. This arrangement continued (subject to the weather) till sufficient fighter squadrons had been moved to the continent to take over the whole commitment.

⁴ This cover was maintained for the first three days; because of the lack of enemy reaction, it was then reduced to three squadrons, and finally, on 11th June, to two squadrons. A reserve of not less than six squadrons was also available for the reinforcement of any sector requiring it.

The night fighter forces available—six Mosquito squadrons—allowed the operation of between 30 and 40 aircraft over the assault areas and shipping lanes during the night. During the critical periods of first and last light, adequate cover was ensured by twelve British and twelve American squadrons of fighters which had been specially trained to take off and land in darkness.

The central control of both day and night fighter forces was exercised by the Combined Control Centre, Uxbridge, using the static organization of the Air Defence of Great Britain. Three fighter direction tenders (F.D.T.) operated as forward controls, one being stationed in each task force area, and one in the main shipping approach. Alternative arrangements were made in case one or more of the F.D.T.s should be lost.

The Commander, Advanced Allied Expeditionary Air Force¹ was kept informed through naval channels to Portsmouth and thence to Uxbridge of the Naval and Military Commanders' intentions and requirements by an Air Staff Officer embarked in each assault force headquarters ship. These ships were equipped for the control of direct support aircraft, and also to act as stand-by to the fighter direction tenders², but in neither case did the need arise for them to exercise direct control of the fighters.

57. Situation at the Close of D-day, 6th June, 1944

(Plan 14)

The close of D-day saw the assault formations firmly established on shore in each of the five areas (see Plan 14) and the disembarkation of the follow-up formations in full swing³. In the Cotentin Peninsula the 4th U.S. Division had secured an initial holding some 4,000 yards long and at one point had penetrated to a depth of five miles. Contact had been established with the 101st U.S. Airborne Division, which had captured St. Martin de Varreville and Pouppeville, and was spread over a large area in the planned zone.

In the "Omaha" area, despite the unexpected initial difficulties and severe losses, the V U.S. Corps had secured a beach head somewhat more than a mile in depth.

In the British area, the forward troops of the 50th Infantry Division were on the high ground east of Bayeux from Vaux-sur-Aube to Brecy by nightfall, and were in contact with the Canadians on their left, but not with the Americans on their right. The 3rd Canadian Division had reached a line Creully-Benny-sur-Mer, while the 3rd British Division having captured Ouistreham was established on the line Perriers-sur-le-Dan-Benouville, where it was in contact with the 6th Airborne Division. This latter division had seized the bridges at Benouville and Ranville by a coup de main, and had established a limited bridgehead across the River Orne.

¹ Air Marshal Sir A. Coningham, K.C.B., D.S.O., M.C., D.F.C., A.F.C.

² Admiral Ramsay remarked: "The R.A.F. teams manning the control equipment of these ships did excellent work and produced most creditable results; however, the Fighter Direction Tenders failed to make any appreciable difference to the main threat, by mining, to the naval forces due to the inability of R.A.F. equipment to see low-flying aircraft. . . . Throughout the operation the vulnerability of the Fighter Direction Tender was a continual source of worry and prevented them from being employed to the best advantage." A.N.C.X.F. Report, Vol. 1, p. 122.

³ In the British area a total of 70,472 troops of the Assault and Follow-up formations was landed on D day. The casualties were surprisingly light, amounting to 1,848—an eloquent tribute to the neutralizing effect of the Air and Naval bombardment.

The official historians have estimated that up to midnight, 6/7th Jun = 75,215 landed by sea suffering 3,000 casualties, and 7,900 landed by air, suffering 1,300 casualties, - a total of 83,115 landed suffering 4,300 casualties.

The feebleness of the enemy's air efforts against either shipping or beaches was a remarkable demonstration of the degree of air superiority that had been obtained before D-day, and a legitimate cause of satisfaction and encouragement for the future.

From the naval point of view in Admiral Ramsay's words, "the outstanding fact was that despite the unfavourable weather, in every main essential that plan was carried out as written¹." Losses of ships and landing craft of all types were much lower than had been expected, but damage to L.C.T. and smaller craft, aggravated by the rough weather conditions, was considerably higher². The rough weather also rendered the unloading of L.S.T. by Rhinos³ a slow process and by dark their discharge had fallen badly behind the planned timetable.

At sea, the build-up convoys were converging on the assault area according to plan and virtually unmolested. Anxiety had been felt regarding the passage of the Straits of Dover of Convoy E.T.P.1, consisting of nine large personnel ships from the Thames⁴—the first large ships to pass through the Straits for four years. A most effective smoke screen, complementary to shore-based radio counter measures, was laid by F.A.A. aircraft and motor launches, and the convoy passed the Straits at 1700, 6th June, without interference, though a ship⁵ in an M.T. convoy preceding it had been sunk by enemy shore batteries.

"By the end of D-day immediate anxiety was felt on only one count—whether the weather would improve sufficiently quickly to enable the build-up to start as planned⁶."

Meanwhile, in the assault areas inshore sweeping had been completed in the course of the afternoon and the ships remaining off the Coast of France shifted berth from the lowering positions to the anchorages off the beaches. At dusk the measures for the defence of the anchorage by night were put into force.

¹ A.N.C.X.F. Report, Vol. 1, p. 12.

² The following tables gives the casualties of craft lost or disabled in the assault. It is estimated that about 50 per cent. of the casualties were due to beach obstacles in combination with Teller mines attached to them. All Naval Commanders remarked on the urgent need for some form of shallow draught tug to clear damaged craft from the beaches.

Type of Craft.	Eastern Task Force.			Western Task Force (Figures approximate).	Total.
	"S"	"J"	"G"		
L.C.T.	18	45	34	34	131
L.C.I. (S)	15	7	—	—	22
L.C.I. (L)	9	—	—	12	21
L.C.S. (M)	—	2	—	—	2
L.C.A.	29	36	52	—	117
L.C.M.	7	—	—	—	7
L.C.P. (L)	1	—	3	—	4
					304

³ Some apprehension had been felt as to the number of Rhinos which would survive the passage, but only three were lost. 17 out of 39 Rhino tugs broke adrift, however.

⁴ This was the only personnel ship convoy sailed from the Thames during the build-up.

⁵ S.S. *Sambut*.

⁶ A.N.C.X.F. Report, Vol. 1, p. 12.

58. Defence of Allied Anchorages

(Plans 10 and 11)

The defence of the Allied anchorages presented a problem which differed from that in previous amphibious operations. The numbers of ships and craft employed was much greater; the anchorages were more concentrated; and the Allies possessed a high degree of air superiority¹.

It was appreciated that attacks at night or in short visibility by aircraft, E-Boats and possibly W-Boats would constitute the main threat to the anchorages; attack by other surface craft and U-Boats was discounted owing to the enemy's minefields, as well as the Allied naval superiority, and the weight of the air attack would be considerably reduced by the Allied air superiority².

On these considerations, a static method of defence was adopted, which had the additional advantages of ruling out the risk of casualties from collision or chance encounter among a large number of vessels manœuvring by night in strong tidal streams, and of reducing the wear and tear on ships' companies and machinery.

Plan 10 shows the defence scheme adopted in the Eastern Task Force.

The responsibility for dealing with enemy forces in the English Channel outside the assault area rested with the Commanders-in-Chief, Portsmouth and Plymouth and the Vice-Admiral, Dover³ (see Sec. 22 *ante*) and any attack from the westward would necessarily pass through the American area; the defence scheme therefore aimed primarily at guarding against attacks from the north-eastward (including the estuary of the Seine) known as area "Tunny" and from the northward, known as area "Pike." Area "Tunny" was regarded as the more dangerous, since radar warning might be compromised by land echoes.

The night defence measures varied in detail from night to night⁴, but the normal procedure was briefly as follows. The Naval Commander, Eastern Task Force, himself exercised direct control of the defence of the whole area from seaward attack, but Assault Force Commanders were each responsible for dealing with any enemy forces which succeeded in breaking through into their assault areas, as well as for landward attack (either by shore guns or midget craft) and enemy air attack. Under N.C.E.T.F. a Captain known as "Captain (Patrols)" was responsible for the organization of seaward patrols (other than coastal forces), the organization and efficiency of the night defence lines, and the operation of defence forces in area "Pike."

A line of minesweepers was anchored five cables apart in a defence line which ran six miles from the shore and parallel to it. This line was continued down the vulnerable eastern flank by a line of L.C.G. and L.C.F. anchored

¹ No Fleet or Station orders readily applicable existed. Standing orders were produced for the Eastern Task Force, known as the British Assault Area Defence orders (B.A.A.D.O.) and issued after the measures contained in them had been tested in Exercise "Cantab" (see Sec. 30 *ante*).

² Rear-Admiral Vian subsequently remarked: "The enemy reacted much on the lines expected. One tactical surprise was produced, the Oyster mine laid in large numbers. For this mine we possessed no sweep. Neither W-Boats, human torpedoes nor submarines made an appearance in the British Assault area during the period of this report (5th-30th June, 1944) nor was there any attempt to interfere with the operation by heavy surface forces." A.N.C.X.F. Report, Vol. 2, Report by N.C.E.T.F., p. 16.

³ The measures adopted were co-ordinated by A.N.C.X.F.

⁴ Various orders and policies were laid down in B.A.A.D.O. to suit different circumstances. To enable N.C.E.T.F. quickly to order the appropriate defence measures, a code letter was allocated to each order, and a number to each particular method of defence contained in it.

one cable apart, known as the "Trout" line. On these minesweepers and landing craft lay the responsibility of preventing any enemy craft from entering the British assault area. They were to be prepared to counter-attack any submarines detected, and to illuminate the outer areas when ordered to do so.

Two or three divisions of M.T.B.s were stationed stopped but underway, to the north-eastward of the north-east portion of the defence line, and two or three sub-divisions of destroyers patrolled to the north of the western part of area "Tunny," and sometimes to the northward of the M.T.B.s¹.

Captain (Patrols) in a frigate or flotilla leader, and on occasions other destroyers, were under way but stopped close inside the defence line to act as reinforcements. B.Y.M.S. and M.M.S. were anchored as minespotter in suitable positions, originally in the approach channels, but later in the lateral channel which was established in the area.

Smoke was employed successfully to screen the anchorage in the early stages of the operation, but later, when the enemy confined his night attacks mainly to minelaying, this policy was modified, as the necessity for spotting and marking the fall of mines was paramount.

The control of night defence measures against surface attack was centred in the operations room of the *Scylla*², which anchored each night about 2½ miles inside the defence line near the north-east corner, where she was well placed to give maximum radar cover to the north-eastward and was outside easy torpedo range of enemy craft firing outside the defence area. Information and orders were passed out by R/T and divisions of M.T.B.s or destroyers were vectored to intercept the enemy in the same manner as fighter interception is worked.

Day defence measures included a patrol to seaward by corvettes, trawlers and sometimes destroyers, organized by Captain (Patrols), guard and duty destroyers at short notice in each assault area, and at dusk and dawn a smoke screen laid by L.C.P.(L) and motor launches. In the event the day defence was not tested.

As regards air defence, the fighter protection provided has already been described (see Sec. 56 *ante*). The main naval problem was to obtain adequate information for gunnery purposes and air raid warnings.

Initially, separate warnings were issued for each assault area with little reference to each other; later it was found that co-ordination over a wider area than one assault force could cover was desirable and the "Neptune" Task Force areas proved a convenient size. "The weakness of the warning system was the almost exclusive use of R.A.F. sources of information to start with, which left a bad gap to seaward, low down, where naval radar produced the best results; this was gradually rectified, but always remained a weak spot³."

¹ The static part of the defence was never tested during the period under review, all enemy attempts being intercepted by the seaward patrols. Later, the L.C.G.s and L.C.F.s (subsequently reinforced by M.L.s) in the "Trout" line, under Commander K. A. Sellar, took a heavy toll of human torpedoes, explosive motor boats, and other "curiosities" with which the enemy attacked in July and August.

² After the *Scylla* was mined on the night 23rd/24th June, control of night defence measures was transferred to the Captain (Patrols) in the *Retalick*.

³ A.N.C.X.F. Report, Vol. 2, Report of N.C.E.T.F., p. 122.

Rear-Admiral Vian recommended the use of radar pickets fitted with good low warning radar, to seaward of the main force. This proposal was concurred in by A.N.C.X.F.

In the American area, dispositions were primarily designed to give protection from the north and west. The general arrangements are shown in Plan 11.

Destroyers, patrol craft and steam gunboats patrolled the "Dixie" line—a continuation of the British defence line A, running from a point seven miles from Port en Bessin on the boundary between the two task force areas to a point 026° three miles from the St. Marcouf Islands. Motor torpedo boats were stationed thence to the northern limit of "Utah" beach; this was known as the "Mason" line.

The whole task force area was divided into eight defence areas, areas "Mountain," "Hickory" and "Elder" to seaward and "Prairie," "Vermont" "Kansas," "Oregon" and "Ohio" to the south and east of the defence lines. A division of four destroyers was stationed to the southward of the "Dixie" line towards its western end (in area "Prairie") and radar guard destroyers in the northern parts of areas "Kansas" and "Ohio." Later on, as the result of experience, S.G.B. and M.T.B. units were stationed to the northwest of the anchorages in area "Mountain," whence they could be vectored to intercept enemy forces rounding Cape Barfleur.

As in the British area, the Task Force Commander controlled the defence arrangements, the Assault Force Commanders being responsible for organizing inner screens for their respective areas, *i.e.* Force "U" for areas "Vermont" and "Kansas" and Force "O" for areas "Oregon" and "Ohio."

59. The Night of D-day (6th/7th June, 1944)

The first night on "the other side" passed fairly quietly as far as the assault areas were concerned. As had been anticipated there were air raids, but they were in no great strength and the damage inflicted was negligible. Mention has already been made of the raid over "Sword" area, which unfortunately led to the destruction of friendly transport aircraft. In "Gold" area the trawler *Grenadier* shot down an enemy aircraft at 0110, 7th June, and shortly after dawn the force headquarter's ship *Bulolo* was hit by a 250-lb. phosphorous bomb, which killed three officers (two R.A.F. and one Naval) and one naval rating. "This did not in anyway interfere with the operational efficiency of the ship, although a hole 5 ft. in diameter was blown in the foremost bulkhead of the operations room¹."

A half-hearted attempt was made by surface forces² to enter the British area from the northeast by eight E/R-Boats which were picked up by radar at 0336, 7th June. Two divisions of the 29th and 55th M.T.B. Flotillas were

¹ A.N.C.X.F. Report, Vol. 2, Report by N.C., Force "G," p. 8.

² The disposition of the German E-Boats on 6th June was as follows:—

Cherbourg	..	5th M.T.B. Flotilla : 7 boats operational, 1 non-operational.
		9th M.T.B. Flotilla : 7 boats operational.
Boulogne	..	4th M.T.B. Flotilla : 8 boats operational.
Ostende	..	2nd M.T.B. Flotilla : 5 boats operational, 2 on passage from Ymuiden.
Ymuiden	..	8th M.T.B. Flotilla : 4 boats operational, 2 of 2nd Flotilla non-operational.

Four torpedo boats (*Jaguar*, *Moewe*, *Falke*, *T.28*) were based at Havre. (From War Diary of Naval Group Command, West.)

vectored to intercept them and engaged them heavily, driving them into a minefield in area Scallop minus off Le Havre: it was thought that one E-Boat was sunk, that another blew up and a third was badly damaged¹.

No surface attacks materialized in the American area. Air attacks on "Omaha" anchorage occurred between 2300, 6th and midnight, but no damage was done to shipping, though several bombs fell very near to Rear-Admiral Hall's flagship, the *Ancon*, who shot down one of the attacking aircraft. Force "U's" luck held throughout the night, and no attack—either surface ships or air—took place in area "Utah."

Outside the assault areas, in the English Channel, there were signs of more vigorous enemy reactions. There had been indications that attacks on "the Spout" and the Western Task Force area, as well as attempts to mine the cross-Channel routes, might be expected. The Commander-in-Chief, Portsmouth, disposed his patrols similarly to the previous night, except that the patrol off Cape Barfleur was reinforced by the *Retalick* controlling two units of M.T.B.s.

Most of the coastal forces forming the "West Wall," including the destroyers *Onslow* and *Offa*, had brushes with the enemy during the night². M.T.B.s 448 and 478 were attacked by E-Boats showing the correct Allied minor war vessels display sign and single letter identification signal; they were recognized by their speed and silhouettes and one E-Boat was thought to be damaged in the ensuing action. An unknown vessel—probably an E-Boat—was seen to blow up in the mined area off Cherbourg³. Another group of E-Boats actually reached "the Spout" but was driven off by the *Hambledon*. The *Onslow* and *Offa* were near missed by bombs, and the *Retalick* was twice unsuccessfully attacked with torpedoes. At dawn the Cape Barfleur patrols were withdrawn to be clear of a Beaufighter sweep, which sighted and attacked two E-Boats, unfortunately without success.

No attempt was made on the "East Wall," the three E-Boat flotillas based on Boulogne, Ymuiden and Ostende being confined to patrols in the eastern part of the Channel, owing to the German fears of another landing in the Pas de Calais. These patrols were frequently attacked throughout the night by aircraft of No. 16 Group⁴; no surface contact occurred except a brief action off Dungeness between the *Obedient* and E-Boats, which immediately retired to the eastward⁵.

¹ The difficulty of assessing the results of night actions—especially such as occur between small, fast-moving craft—is well known. In this battle summary, the accounts of night actions are based on the contemporary British reports, discrepancies with the German version as recorded in Admiral Krancke's War Diary being given in footnotes. Both sides were naturally prone to claim higher results than actually occurred.

According to the German report on this occasion, these craft belonged to the 10th Minesweeping Flotilla, which had been employed in laying mines. The only damage suffered by them was one minesweeper out of action for a fortnight. Two torpedo boats (*Jaguar* and *Moewe*) also operated from Havre that night.

² These attacks were carried out by the 5th and 9th German M.T.B. Flotillas (14 E-Boats) based on Cherbourg.

³ Two E-Boats were mined and sunk in this area.—Admiral Krancke's War Diary.

⁴ See Sec. 22 (*ante*).

⁵ Part of 4th M.T.B. Flotilla, based on Boulogne. According to the German War Diary, no damage was suffered by the E-Boats, but one (S.174) had previously been damaged by air attack.

Further afield, in the Plymouth Command, air reconnaissance had reported the departure of two "Narvik" destroyers and the ex-Dutch destroyer *Tjerk Hiddes* from the Gironde on 6th June (D-day). The 10th Destroyer Flotilla was ordered to the Western patrol (north of Ushant)—being relieved on the Hurd deep patrol by "S" class destroyers—and a sweep to the southward of Brest was carried out during the night of 6th/7th. Nothing was sighted by the destroyers but Beaufighters made contact with the enemy in Lat. 46° 53' N., Long. 2° 53' W. (to the southward of St. Nazaire) and claimed hits on two ships. The enemy retired into Brest—to be finally dealt with 48 hours later (see Sec. 65 *postea*)—and the 10th Destroyer Flotilla resumed station on the Western patrol.

While this was going on the opening moves of the enemy's submarine offensive against the convoy routes—foredoomed to conspicuous failure—were taking place. Five submarines had been sighted by aircraft to the southwest of Cape Ushant at 1850, 6th June. That evening the 3rd Escort Group sailed from Milford Haven to patrol in the Lizard-Scillies area and the 12th Escort Group was ordered thence to a position 20 miles northwest of Ushant; later, the 14th Escort Group sailed to patrol the central channel route.

During the night aircraft sighted 14 U-Boats—all except two off Ushant. Eight attacks were carried out, two or three with success¹. No U-Boat got so far north as the A/S Support Groups.

With dawn, 7th June, a clear 24 hours had elapsed since the start of the invasion. From the naval point of view the assault phase could be considered at an end. The assault troops and follow-up formations had been landed successfully all along the front; the arrangements for the security of the anchorages and sea communications had stood the test of the first day and night satisfactorily; a start had been made in reducing to order the confusion on the beaches and off shore inseparable from the early stages of such an operation, and the first convoys of the build-up were then arriving in the assault area. The period of consolidation, on which depended the ultimate success of the whole campaign, was setting in.

Before many hours elapsed Admiral Ramsay, accompanied by the Supreme Commander, proceeded to the assault area in H.M.S. *Apollo* to see for themselves how things were progressing². Many broken down landing barges and craft adrift were observed during the passage and aircraft reconnaissances were ordered to facilitate rounding them up. Visiting "Omaha" first, they realized the difficulties of the situation there and formed the opinion that Force "O" had done well. "Conditions were not good for unloading, with a nasty lop troubling smaller craft. In the confusion still existing the ferry service had not yet been organized. Assault forces were suffering from lack of armoured vehicles, chiefly through drowning of "DD" tanks when launched³." At other beaches the lop was not so bad, as the weather was improving during the day; but the beaches were littered with stranded craft and, chiefly owing to the loss or damage to so many craft, and to the initial confusion, the ferry services were not functioning at more than 10 per cent.

During the tour of the beaches, the *Apollo* struck a 3-fathom patch, damaging her propellers. The Supreme Commander and Admiral Ramsay transferred to H.M.S. *Undaunted*, in which they returned to Portsmouth towards dusk.

In the course of the day General Montgomery took passage in H.M.S. *Faulknor* to the far shore and set up his Tactical Headquarters at Creully.

¹ Three U-Boats returned to Brest 6th/7th June, owing to casualties and damage. (Extracted from German Naval War Staff Diary, Part A, Vol. 58.)

² While in the assault area H.M.S. *Apollo* wore a red flag with four white stars to denote the presence on board of the Supreme Commander, General Eisenhower being at the time a "Four-Star" i.e. Full General in the U.S. Army.

³ A.N.C.X.F. War Diary, 7th June, 1944.

Part III

CONSOLIDATION

VII.—POST ASSAULT PERIOD

60. General Review, 7th June-4th July, 1944.

(Plan 14)

From the assault landings on D-day to the withdrawal of the Task and Assault Force Commanders at the beginning of July—which marked the conclusion of Operation "Neptune"—the naval effort was primarily focussed on building up the army to the required size and maintaining its supplies and reinforcements.

The operations during this period, both from a naval and a military point of view, can be divided into two phases:—

Phase 1.—7th-15th June.—The "Break in" or establishment of a firm bridgehead with a continuous front by the army. During this period the far shore organizations were gradually developed till the naval organization generally was a going concern and the rate of build-up approximated to that planned.

Phase 2.—16th-30th June.—Development. The cutting of the Cotentin Peninsula, capture of Cherbourg and enlargement of the bridgehead south of Bayeux. By mid-June the naval arrangements were running smoothly and the Force Commanders were about to hand over to the Flag Officers appointed to command the respective areas, when on 16th the weather started to deteriorate, culminating in a heavy north-easterly gale between 19th and 22nd June, which virtually brought unloading to a standstill and wrought great damage to both shore facilities and shipping. Much of this was irreparable, and the whole far shore organization had to be got going anew, with, in addition, the heavy task of clearing wreckage from the beaches, etc.

During both these phases bombarding ships supported the army as and when required. Naturally, as the army advanced further inland, calls became less frequent and after about D+4 (10th June) bombardment was mainly confined to support of the left flank of the British 1st Corps in front of Caen, where the enemy concentrated the bulk of his armour, and counter-battery fire at enemy positions east and south-east of the River Orne within range of "Sword" area and beaches. In the American area the bombardment group was transferred to the Support Force on D+8 (14th June), and the next day Rear-Admiral Deyo assumed command of this force as C.T.F. 129.

Enemy efforts to disrupt the naval traffic were intensified after the initial surprise but were ineffective. Frequent attempts on the "Spout" and anchorage by surface craft were almost invariably intercepted and driven off; in no case was any success obtained by them in the assault area. The submarine offensive, too, was mastered with but little difficulty. The only measure of success obtained by the enemy was through minelaying by low flying aircraft; this form of attack proved very difficult to counter and took its toll of Allied shipping.

61. Beach Organization and Far Shore Services

The first step in setting up the beach organizations had started at H-hour, when Assistant Beachmasters with small advance parties had landed with the assault infantry, suffering proportionately heavy casualties in doing so.

The principal beachmasters with the remainder of the beach commandos followed about half an hour later and started on their thankless task of reducing the initial chaos left by the assaults to order¹, Deputy N.O.I.C.s landing at about the same time.

In the British areas the beach N.O.I.C.s landed at about H+4 hours and set up their advance headquarters, their staffs being gradually built up in accordance with a pre-arranged plan and main headquarters opened in the course of the next few days.

The main responsibilities of the N.O.I.C.s may be summarized as follows :—

- (a) Establishment of the naval organization required to discharge all craft and shipping in his area.
- (b) Provision of communications necessary for (a).
- (c) Despatch of ships and craft after discharge to sailing areas.
- (d) Inshore repair of ships and craft.
- (e) Administration of all naval personnel ashore.

A typical N.O.I.C. organization is shown in Fig. 13.

The American method of establishing beach control differed fundamentally from the British. Whereas in the latter the N.O.I.C.s headquarters was superimposed on the initial British organization as early as possible—thereby involving a relatively small increase of personnel and giving continuity from the assault phase to the build-up—the American system provided for a complete N.O.I.C. organization taking over from the original beach battalions some days later².

The discharge and turnround of shipping was controlled by the Assault Force Commanders throughout the first 24 hours after landing³. Thereafter, the following system was adopted in the British area. Daily meetings were

¹ Rear-Admiral Talbot subsequently commented on the initial difficulties with which the beach parties had to contend. In "Sword" area fire from mortars and small arms was at its peak about the time that the main body of the Beach Commando, under Lieut. E. F. Gueritz, D.S.C., landed on "Queen" sector. "Beach exits were not yet working properly. There was some congestion on the beach. Many of the obstacles were already some four feet under water. In addition great difficulty was experienced in landing the beach party's heavy stores from L.C.T. owing to the depth of water at the ramp, and much of the gear had to be abandoned. . . ."

The task that confronts Beachmasters on first landing is superhuman. The beaches are long and difficult to inspect quickly or easily at all. The beach parties . . . are extremely vulnerable. Things are happening very quickly on all sides. It must be accepted that craft are not flagged in, that beach signs are not immediately erected at this stage." A.N.C.X.F. Report, Vol. 2, Report by N.C. Force "S", p. 23.

² Admiral Ramsay subsequently remarked: "Perhaps the greatest advantage in the U.S. system is that many of the specialized personnel required for the assault soon became redundant during the build-up, and if the whole battalion is relieved it can be made ready for the next assault operation. The U.S. reports do, however, show that the transition period was a difficult one. It is also difficult to plan the precise time one organization should relieve the other, and hence there may well be an interim period of dual control, which is highly unsatisfactory. . . ."

It is understood that as a result of the experience in "Neptune" the U.S. intention in the future is to land the N.O.I.C. with a nucleus staff at the outset of the operation, so that he can immediately get into the picture." A.N.C.X.F. Report, Vol. 1, pp. 70, 71.

³ Till the beginning of nautical twilight on the morning of D+1.

OPERATION "NEPTUNE"

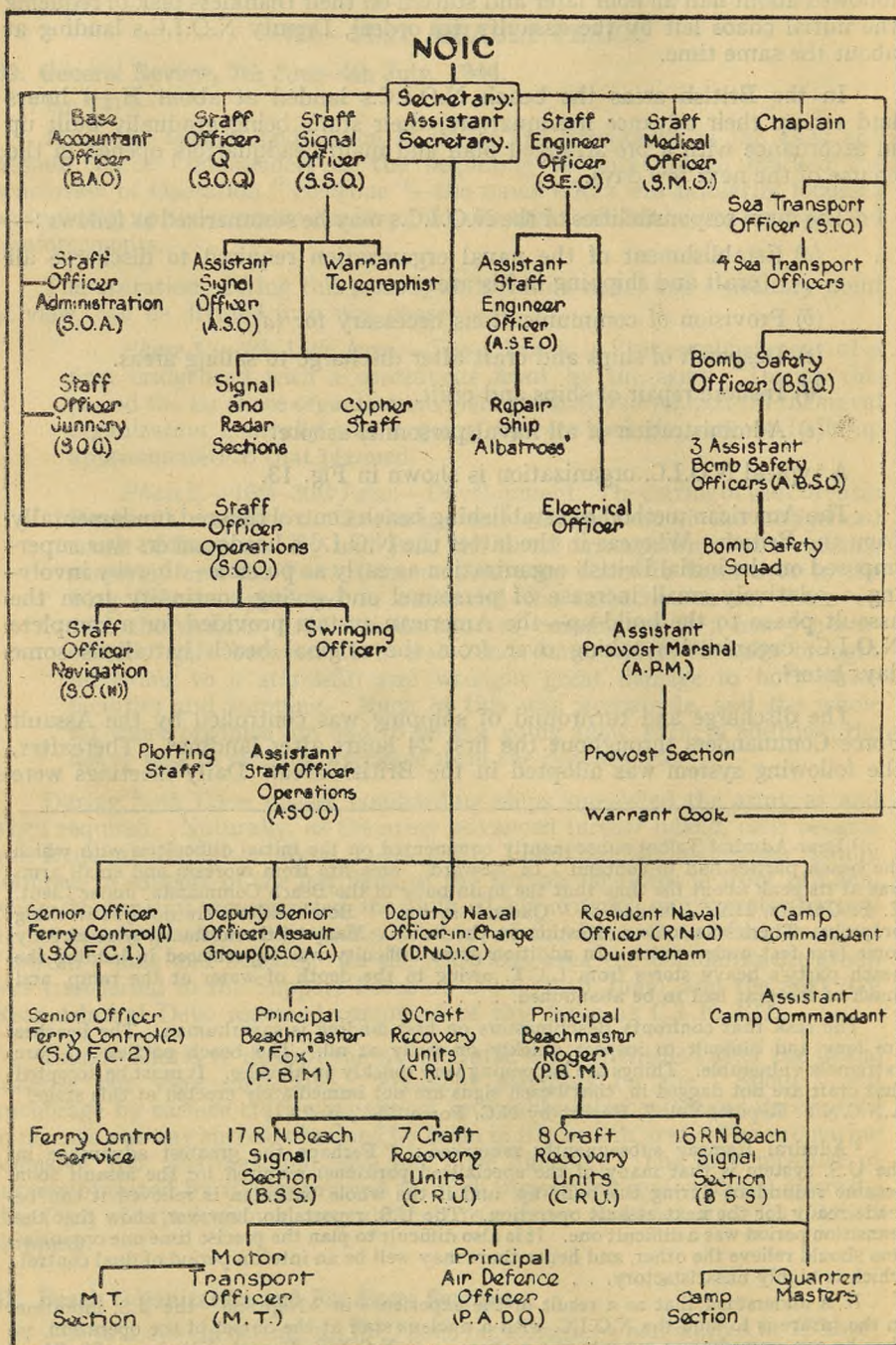


Fig. 13. Typical Beach N.O.I.C. Staff and Organization ("Sword" Area).

held by the Task Force Commander (or his representative) which were attended by all naval and military authorities concerned with the co-ordination of discharge throughout the task force front. The N.O.I.C.s and Beach Sub-Area Commanders gave the instructions required to implement the decisions arrived at by these meetings to the beach groups, upon whom fell the responsibility of the detailed allocation and control of ferry craft, amphibians, etc. In the meantime, the necessary instructions were given to the Captain, Southbound Sailings (Captain J. W. Farquhar, R.N.¹, in H.M.S. *Nith*), to enable him to control the inward routeing of convoys from the "point of arrival"² to the assault force zones. Authorities detailed by the Assault Force Commanders arranged for the reception and berthing of shipping and the control of the shuttle service into the beach, keeping themselves fully informed of the military aspect of the picture through the N.O.I.C.³

Shipping for the return to the United Kingdom closed the "point of departure" where was stationed Captain, Northbound Sailings (Captain R. Gotto, in H.M.S. *Goathland*), who was responsible for the formation, routeing and sailings of convoys and for detailing escorts. Routine times were laid down for normal sailings, namely M.T. ships and L.S.T. at 0930; coasters at 1100 and L.S.T. at 1600. Personnel convoys were sailed whenever ready, and mis-muster convoys in the evening.⁴

On the establishment of the American N.O.I.C. Organizations on shore, about D+6, similar methods were adopted in the U.S. assault area, where H.M. ships *Capetown* (Captain H. F. Nash, R.N.) and *Ceres* (Captain R. C. Allen, R.N.), which were used as depot ships, had been carrying out the shuttle control and duties of Captains, South and Northbound Sailings respectively since D+3.

Naturally, these newly established organizations could not be expected to function faultlessly at the start; there were delays for various reasons, but Admiral Ramsay has left it on record that "what they achieved was really

¹ Captain Farquhar was seriously injured while proceeding inshore on 11th June in M.G.B.17, which struck a mine. Captain A. B. Fanshawe, R.N., was then appointed as Captain, Southbound Sailings.

² The point of arrival was defined as the centre of the southern extremity of the main channel in force for southbound shipping in approximate Lat. 49° 27' N. The point of departure was in the same latitude in a similar position relative to the channel in force for northbound shipping. The main channels in use depended on the progress of mine-sweeping.

³ Typical Far Shore Chain of Command is shown in Fig. 14 ("Juno" area). See also Plan 9.

⁴ The various classes of ships were sailed by the following authorities:—

N.C.E.T.F.	Minesweeping flotillas and as requisite.
Flag Officers Commanding, 2nd and 10th C.S.	Battleships, cruisers; monitors, gunboats, battle-ship escorts.
Assault Force Commanders . .	All other warships, other than those of escort service: shuttle service convoys; hospital carriers, except <i>Batavier II</i> and <i>New Bedford</i> .
Captain, Northbound Sailings. .	Personnel, M.T. coaster and L.S.T. convoys; ancilliary shipping and craft (except Mulberry and Gooseberry No. 3 tugs); colliers, water tankers, oilers, <i>Batavier II</i> and <i>New Bedford</i> .
N.O.I.C., Mulberry	Mulberry and Gooseberry No. 3 tugs.

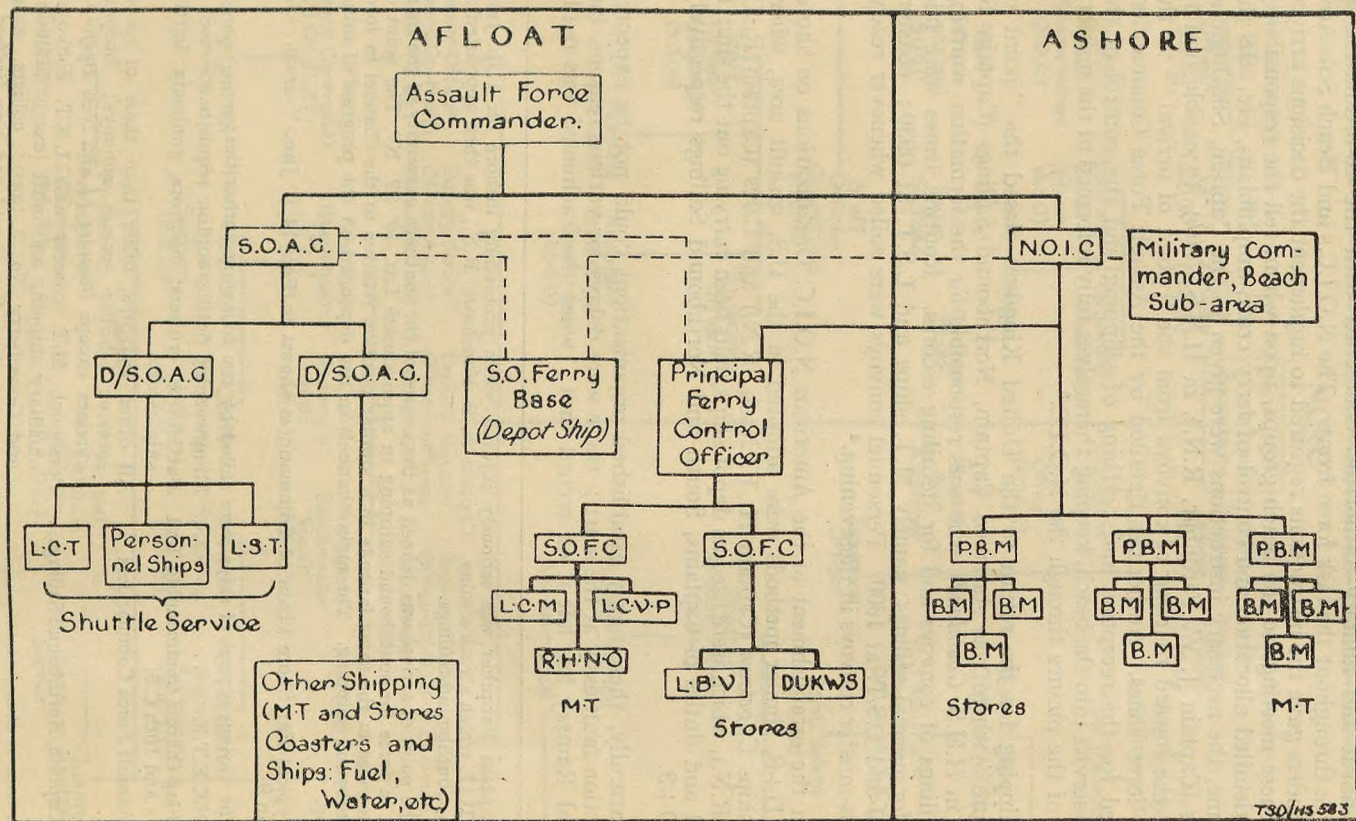


Fig. 14. Typical Far Shore Chain of Command (Juno Area).

remarkable. It has been said that on the stores side alone the tonnages handled daily into France were over one-third of the normal import capacity of the United Kingdom. On an average day during the first week the following number of ships and craft arrived off the assault area :—

25 'Liberty' ships.
 38 Coasters.
 40 L.S.T.
 75 L.C.T.
 9 Personnel ships.
 20 L.C.I.(L).

The identification, unloading, marshalling and sailing of such a volume of shipping off an open coast was a gigantic problem, which was rendered more difficult by the adverse weather experienced."¹

62. The Start of the Build-up

The build-up was planned to commence immediately on D+1 (7th June) with the arrival of eight ship convoys² on that day. The convoys all arrived on time but unloading was severely restricted due to the unfavourable weather, the wind being force 5 from the north at midday. As yet no lee could be obtained, but the arrival of the first "Corncob" convoy at 1230 that day gave promise of better times and the ticklish operation of sinking these ships to form the "Gooseberry" shelters was commenced at once.

Four warships, H.M.S. *Durban*, carrying the S.N.O. "Corncob," Captain L. B. Hill, D.S.O., O.B.E., R.N., H.M.S. *Centurion*, the French battleship *Courbet*, and H.M.S. *Sumatra*, 31 British and 23 U.S. merchant ships were

¹ A.N.C.X.F. Report, Vol. 1, p. 95.

² See App. "H (1)." "Neptune" convoys were designated by three self-evident letters and a serial number, as follows :—

1st Letter.—Country of departure.

E—England.

F—France.

2nd Letter.—Area of arrival or departure in United Kingdom.

T—Thames.

C—Cornwall and Devon.

X—Newhaven (Sussex).

B—Bristol Channel.

W—Isle of Wight area.

M—Miscellaneous.

P—Portland.

3rd Letter.—Nature of convoy.

P—Personnel.

L—L.S.T.

M—M.T. ships.

C—Coasters.

Examples.

E.T.P.1 .. 1st Personnel ship convoy from the Thames.

F.W.M.2 .. 2nd M.T. ship convoy from France to the Isle of Wight area.

Ships joining outward-bound convoys from ports on the south coast, or leaving home-ward-bound convoys for those ports were indicated by the appropriate self-evident letter as a suffix showing area of departure or arrival, e.g. E.T.M.4W—Ships from Isle of Wight area joining 4th M.T. ship convoy from the Thames; F.B.C.2W—Ships for Isle of Wight area leaving 2nd Coaster convoy from France to Bristol Channel.

Suffixes "Y" and "Z" were used to denote different sections of a convoy which owing to its large size was sailed in two sections, and convoys sailing direct from the Isle of Wight area to France were given suffixes "A" or "B," according to whether their destination was the American or British area.

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used for the five "Gooseberries"¹, which were "planted"—one in each assault area—as follows:—

- No. 1. To the eastward of St. Martin de Varreville.
- No. 2. To the northward of St. Laurent.
- No. 3. To the northward of Arromanches.
- No. 4. To the northward of Courseulles.
- No. 5. To the northward of Ouistreham.

The work of sinking² the blockships, all of which proceeded to their positions under their own power, except the *Courbet* which was towed, was carried out skilfully and expeditiously, despite enemy fire and adverse weather, and all five "Gooseberries" were completed as planned by D+4 (10th June).³

They proved invaluable as shelters to the ferry craft and a base for maintenance and repair work, as well as providing accommodation for certain flotilla maintenance parties which were installed on board the blockships.⁴

In the British assault area, as already mentioned (Sec. 57 *ante*), the discharge of L.S.T. on D-day had been delayed and by the forenoon of D+1 (7th June) there were about 100 of these ships waiting to be unloaded. Fewer Rhinos than on D-day were operational owing to damage whilst beaching⁵ and attempts made by Force "J" to beach some of the L.S.T. at high water failed to relieve the situation since the depth of water at the foot of the ramp was too great to allow the vehicles to drive out. "Drastic action was therefore necessary and approval was given to beach and dry out L.S.T."⁶ About 40 L.S.T. were dried out on the afternoon tide; very little damage was sustained and this method of unloading L.S.T. was adopted as standard. The remainder were cleared by the end of D+2 (8th June).

The unloading of M.T. ships was seriously slowed down by the losses suffered by L.C.T.(5), of which 16 were broken down, four had been lost on passage, and 24 damaged by shellfire and obstacles, leaving only 19 available for unloading on D+1. On that day 24 M.T. ships and 20 M.T. coasters arrived; on the day following (D+2) an additional 25. By this time L.C.T. from the Western Task Force had brought their numbers up to 85; Rhino ferries also were used—after the drying out of L.S.T. had proved feasible—

¹ The Germans seem to have been slow to appreciate the implications of the "Gooseberries." Three weeks later, under the date 27th June, Admiral Krancke's War Diary contains the entry: "Great numbers of ships off Orne. In the centre old French battleship with tripod mast apparently lying on the sea bed. North of it other sunken ships . . . Most of the sunken ships probably struck mines." (Author's italics.) War Diary of Naval Group Command, West.

² The vessels were prepared for sinking by having a 10-lb. amatol demolition charge placed each side in each hold, 3 feet below the operational water line, *i.e.* the majority had eight charges in all, the larger ones 10. Larger charges were used in the warships.

³ "Gooseberries" Nos. 2 and 3 were subsequently incorporated in the artificial harbours, "Mulberries" "A" and "B" respectively. No. 5 was altered from the original plan at the request of Rear-Admiral Talbot, so as to give more protection from the north-west, and consequently gave little protection from the north-east.

⁴ Admiral Ramsay subsequently remarked: "Although these breakwaters of sunken blockships were designed in the first place to provide sheltered water as a haven for small craft in bad weather, their value in making beaches operable in an offshore wind was enormous." A.N.C.X.F. Report, Vol. 1, p. 72.

⁵ The serviceability of these craft seldom rose above 50 per cent. due to the weather conditions experienced.

⁶ A.N.C.X.F. Report, Vol. 2, Report by N.C.E.T.F., p. 10.

and were satisfactory in reasonably calm weather ; but it would have been difficult to cope with the average daily arrival of 15 M.T. ships planned from D+3 onwards, let alone work off the accumulation of ships from D+1 to D+2. Assault Force Commanders were therefore allowed each to retain up to 24 L.C.T. of the shuttle service to augment the ferry service L.C.T. but it was not till the 14th June (D+8) that the accumulation of M.T. ships had been substantially reduced.

Difficulties in offloading stores were also encountered at the outset. A start had been made in the afternoon of D-day with store loaded L.C.T., which were beached at high water, but congestion on the beaches and lack of transport rendered this a slow business. Little or no progress was made that day with 12 stores coasters which arrived owing to the weather and beach obstacles which had not yet been cleared.

Delays too were occasioned by lack of ferry craft. The L.B.V. convoys, sailing from Chichester and Langstone, should have arrived by the afternoon high water on D-day, but difficulties had been experienced in forming up in the dark and in towing a number of these craft in the existing weather and they were about 12 hours late on arrival¹.

The L.C.M. and L.C.V.P. convoys arrived on time, but many L.C.M. lost touch with their leaders and some of the L.C.V.P. turned back on account of the weather. Few convoys arrived intact² and a number of the craft fetched up in the wrong assault area, with consequent delay while they were being sorted out.

With the arrival of the morning convoys on D+1 (7th June) there were 60 stores coasters in the British assault area ; 24 hours later none had been completely discharged. D.U.K.W.S., which had suffered few casualties, had been fully employed, but the late arrival of the L.B.V., the weather, intermittent shelling of the "Sword" area beaches and military requirements for selective unloading³ had seriously reduced the rate of discharge. Orders were therefore given on D+2 (8th June) that all suitable coasters were to be dried out for unloading wherever space on the beaches could be found for them. Thirteen were successfully beached by Force "J" that day, and from then on coasters were unloaded by this method whenever weather conditions were suitable.

In the American area much the same initial difficulties were experienced as in the British. Rear-Admiral Moon remarked that in "Utah" area the beach gradients of 1/100 and 1/200 made unloading exceedingly slow and difficult at first, but "as experience was gained the apparent liabilities of

¹ Two L.B.V.s were sunk and six were missing on passage.

² An exception to this was Convoy S.M.2 (L.C.M. and L.C.V.P.) "Their escort failed to rendezvous at the NAB, but under the leadership of Acting-Tempey. Major A. E. P. Gladwin, R.M., this convoy of no less than 108 minor craft reached area "Sword" safely and timely, despite most adverse conditions. A fine performance." A.N.C.X.F. Report, Vol. 2, Report by N.C. Force "S," p. 26.

³ Admiral Ramsay subsequently remarked : "The dangerous practice of 'Selective loading' began on both the British and U.S. fronts when the situation became critical due to bad weather causing a shortage of ammunition. It was, however, thereafter continued for weeks with inevitable delays." A.N.C.X.F. Report, Vol. 1, p. 72.

Delays also occurred in getting docks operating or stevedore personnel on board ships for discharge, and inconvenience and loss of efficiency were caused on both fronts through shipping invoices failing to arrive in time.

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"Utah" beach were converted to assets. The flat beaches and great tidal range proved to be ideal for drying out L.C.T.s, L.B.V.s, L.C.M.s, L.S.T.s. and coasters¹ and from D+3 extensive drying out was practised throughout the entire build-up with excellent results. The initial delay in unloading the coasters persisted through the first week, at the end of which (13th June) there were 47 in the area. At a joint Army-Navy meeting certain measures were decided upon to expedite their clearance and by 17th June the number had been reduced to 30.

In "Omaha" area, the last two convoys of the assault forces ("O4" and "O5") arrived some 12 hours late, in the morning and evening of D+1 day respectively; on this day also arrived the first of the build-up personnel convoys of follow-up Force "B," consisting of four transports, one of which—the *Susan B. Anthony*—struck a mine just to seaward of the assault area and eventually sank at 0950, all the personnel on board being taken off successfully. The unloading of these ships, and of the M.T. ships and coasters which were arriving in a steady stream, was very slow and by the morning of D+2 it had become apparent that additional ferry craft would be required if the planned rate of discharge was to be reached. Rhino ferries were proving the most useful craft, and a request was sent to the Commander, Service Force, to send immediately five spare Rhinos, complete with bulldozers, tugs, etc.

This shortage of ferry craft together with difficulties in getting the N.O.I.C.s organization started and the army's insistence "that unloading must be done according to priorities, despite the fact that they were unable to supply information as to the ships in which the wanted material was embarked,"² seriously delayed unloading during the first few days. Then army approval was obtained to unload regardless of priorities; at about the same time it was decided to beach and dry out L.S.T.s³ thus releasing all Rhino ferries and L.C.T.s for clearing M.T. ships; and the port organization which had then been placed under the command of Captain Sabin, U.S.N., commenced to function satisfactorily. The rate of unloading increased rapidly, till by the evening of the 15th June (D+9) the accumulation of unloaded ships was cleared off and from then on—till bad weather interfered on the 19th June—all ships were discharged promptly as they arrived.

It was not only on the far shore that delays occurred in the turn round of ships and craft in the early days of the build-up. Difficulties were also experienced in the United Kingdom, particularly in the Isle of Wight area and Southampton. Apart from the fact that a high proportion of the ships and craft in the build-up had to load there, the problem of the Commander-in-Chief, Portsmouth, was especially hard. The geographical conditions in the area—two entrances to the anchorage and the main port some distance up an estuary—made close control difficult. A major concentration of pre-loaded shipping was

¹ A.N.C.X.F. Report, Vol. 3. Report by N.C., Force "U," p. 34.

² A.N.C.X.F. Report, Vol. 3. Report by N.C., Force "O," p. 7.

At a later date the cargo manifests of the arriving convoys were found in the mail in the British Assault area, where they had been delivered incorrectly addressed by the Army Authorities in Portsmouth.

³ Rear-Admiral Hall subsequently remarked: "In the light of later experience it is regretted that a practice of drying out the L.S.T.s and larger L.C.T.s was not commenced immediately. . . . A.N.C.X.F.'s directive stated specifically, however, that L.S.T.s were not to be dried out except in an emergency. . . ." A.N.C.X.F. Report, Vol. 3. Report by N.C., Force "O," p. 7.

necessary in the Solent throughout the first seven days of the operation, because, as ships moved out to France, so new short endurance coasters arrived for servicing from loading ports on the flanks. As a result the anchorage was greatly congested, and the local difficulties were seriously increased by the return there of a considerable number of ships from France which should have continued to ports on the wings. The situation was cleared up in three or four days, but in the meantime a number of coasters was kept at anchor in the Solent when they ought to have been loading at other ports. There were also delays in getting ships up to Southampton to reload. Superimposed on all this was a considerable movement of tankers and a large number of H.M. ships returning for ammunition, stores, etc.

Admiral Ramsay subsequently remarked that it had been foreseen that the organization in this area might well be strained to the point of danger, but the "extensive and complex programme of movements in the Isle of Wight area during the first week of the operation was carried through with only one mistake of any importance."¹

This exception was the failure to sail the S.S. *Neuralia* to France on D+2. The *Neuralia* had left the Thames on D-day in Convoy E.T.P.1 for St. Helens, whence she should have been sailed a.m. D+2 in Convoy E.W.P.1. In fact she remained at anchor in Spithead till p.m. D+5. This was "due to the double transposition before D-day of the S.S. *Neuralia* and S.S. *Devonshire* by the War Office, coupled with the press of work experienced by the Staff of the Commander-in-Chief, Portsmouth, at the time. . . . It is of note, however, that, although she carried elements of the 7th Armoured Division, their non-arrival in France was apparently not noticed by the 2nd Army and thus no direct harm appears to have been caused by this inadvertence."¹

To return to the far shore. Before many days had elapsed it was found possible to make use of the French ports which had fallen into Allied hands. Port en Bessin had been captured by No. 47 R.M. Commando, commanded by Lieut.-Col. C. F. Phillips, in the afternoon of D+1 (7th June), and at first light next day Commander Cowley Thomas, R.N., opened his headquarters as N.O.I.C. The capacity of Port en Bessin for handling stores either by coaster or L.B.V. greatly exceeded expectations, but the military authorities were unable to take advantage of it at this early stage. By D+8 (14th June) the port was averaging over 1,000 tons a day.

In area "Juno," Courseulles was found to be in a neglected condition, but not seriously damaged, either by enemy sabotage or Allied bombardment. By D+2 the port was being used by L.B.V. and minor landing craft, and after the entrance to the harbour—which had silted up—had been cleared by bulldozers and scrapers at low water, this port also handled an average of 1,000 tons per day.

Discharge was further assisted in area "Juno" by two 700-ft. N.L. pontoons, which were completed by D+4 (10th June) and were accessible for two hours either side of low water. The construction of two similar pontoons in area "Gold" was delayed by loss of material on passage, but they were completed D+8 (14th June) and D+13 (19th June) respectively. These pontoons were used for discharging L.C.T.; they also proved the only practicable way of landing troops dryshod.

¹ A.N.C.X.F. Report, Vol. 1, p. 96.

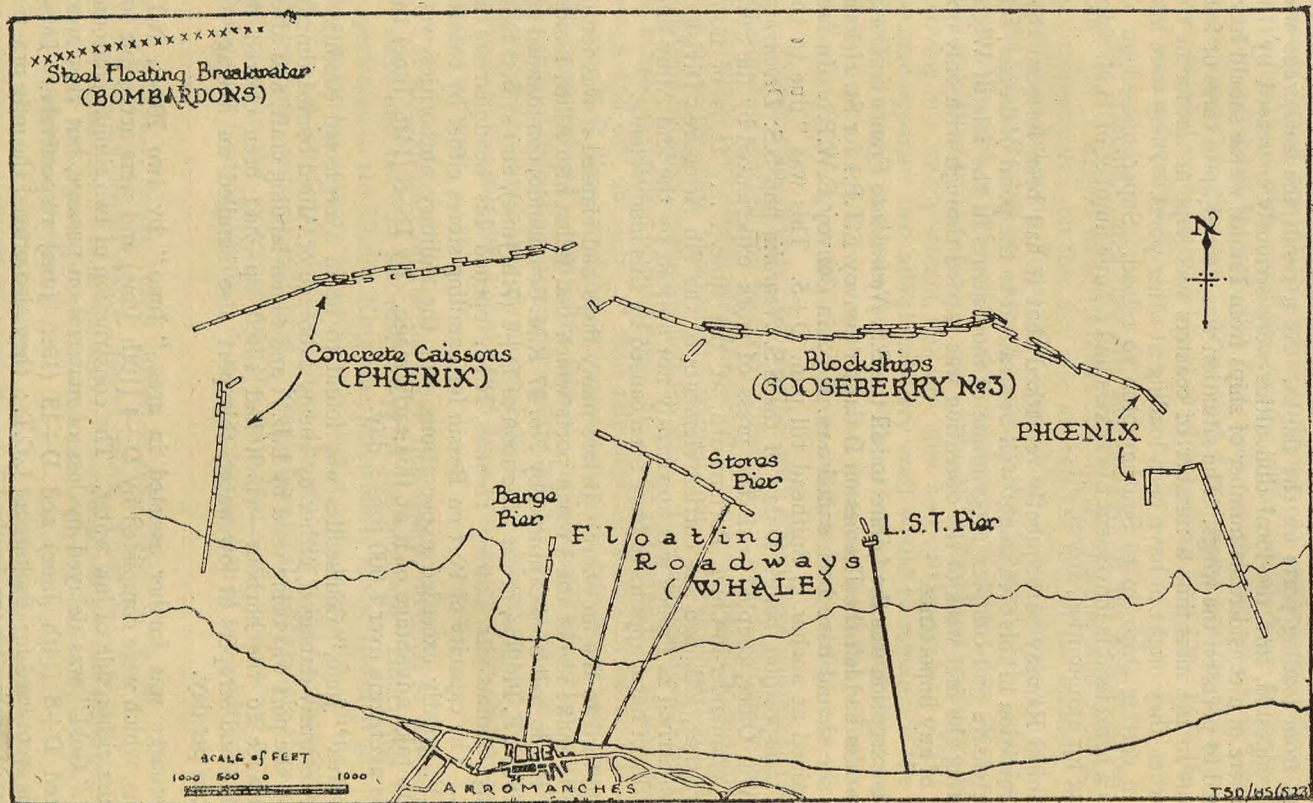


Fig. 15. General Layout of Mulberry "B."

The port of Ouistreham proved somewhat disappointing. The Resident Naval Officer, Lieut.-Commander J. D. Hayes, D.S.O., R.N., arrived with his port party on 7th June (D+1), but the continued presence of the enemy in force on the eastern bank of the River Orne, some 3,000 yards away, prevented this port from playing the useful part that it was at first hoped might be possible¹. Ouistreham remained under mortar and rifle fire right up to the withdrawal of the port party on 29th June (*see* Sec. 68 *postea*).

In the American area it was not until D+7 (13th June) that Rear-Admiral Kirk directed that steps should be taken to develop the minor ports of Grand-camp and Isigny. The work was retarded by bad weather, but they were in operation by the end of the month.

63. "Mulberries."

(Plan 12)

Meanwhile, the construction of the prefabricated harbours—"Mulberries"—had been proceeding rapidly and, on the whole, smoothly in each task force area.

In conception and execution these harbours were unique. Each covered an area comparable to that of Dover harbour, and was required by the Supreme Commander to provide sheltered water by D+4 and to be fully established by D+14². The target daily disembarkation figures for the two harbours were 3,000 tons of stores by D+4, 7,000 tons and 2,500 vehicles by D+8 and finally 12,000 tons and 2,500 unwaterproofed vehicles. They were designed to last for 90 days³, their component parts being capable of being towed and erected in winds of force 4.

It was necessary that their construction should not interfere with the assault and follow-up, and sites were chosen off Arromanches to the westward of the "Gold" area beaches in the British area (Mulberry B) and off St. Laurent (Mulberry A) in the American area.

The main components for the harbours were as follows:—

- (a) Concrete caissons, known as "Phoenix," 200 ft. long and varying in size from 6,000 to 2,000 tons, sunk end to end on the 5½-fathom line so as to form breakwaters⁴. Six miles of these caissons were required.
- (b) Floating steel cruciform structures ("Bombardons"), 200 ft. long, moored end to end to seaward of the "Phoenix" breakwaters to provide shelter for a deep water anchorage.
- (c) Floating piers and pierheads known collectively as "Whale" constructed of steel and concrete, which were towed across in suitable sections and erected on the spot.

¹ Apart from shellfire, the use of the fine stretch of quays beyond the locks (which had survived) was precluded by the swing bridge over the locks having been demolished. This necessitated the building of a static bridge by the army to supplement the main bridge some three miles further up the canal as a vital supply line to the Airborne Division and S.S. Brigade operating on the east side of the river.

² Owing to the shortage of tugs, on 2nd June this target date was altered to D+21.

³ Early in March, 1944, S.H.A.E.F. intimated that further study of probable port facilities available indicated that the Mulberries would be required to outlast the 90 days originally planned and to continue operating for as long as their life could be prolonged into the winter months.

⁴ The "Cornecob" blockships already planted formed a portion of these breakwaters.

The production of this novel equipment in the United Kingdom, coming, as it did, when all efforts were already centred on the preparations for "Neptune," was not easy to achieve in time. Over 50,000 workmen were employed and the work was carried out in docks and shipyards all round the coast, the main sites being the Thames and Southampton areas. The division of responsibility, too, between the large number of Ministries and Service Organizations involved in their design, construction, operation and subsequent erection on the far shore proved a thorny problem¹. It was not until January, 1944, that it was decided that the Admiralty should be entirely responsible for the "Bombardons" and blockships and the War Office for the concrete units and piers, but conforming to naval requirements as regards seaworthiness and towing—an unsatisfactory arrangement, since it left their design in hands unversed in seamanship; this, in the event, caused considerable trouble.

As mentioned previously Rear-Admiral Tennant was placed in general charge of the naval side of the "Mulberries," both in the British and U.S. areas, with Captain Hickling, R.N. as his Chief Staff Officer and Deputy.

Captain A. D. Clark, U.S.N., was responsible for the construction of "Mulberry A" and the two "Gooseberries" in the American area and Captain C. H. Petrie, D.S.O., R.N., for that of "Mulberry B," with which he combined the duties of N.O.I.C. of the port². The "Bombardon" force was commanded by Captain C. N. E. Currey, R.N., and the "Pluto" organization by Captain J. F. Hutchings, D.S.O., O.B.E., R.N.

The first "Mulberry" convoys³ sailed from the United Kingdom on D-day—handling tugs, control ships and mooring forces during the forenoon; "Bombardon" tows from Portland and "Corncocks" from Poole during the afternoon and "Phoenix" tows late that night.

On D+1 (7th June) the laying of "Bombardon" moorings commenced, an evolution performed so efficiently by the boom defence mooring vessels under Commanders C. I. Horton and Hunter-Blair, R.N., in the British and American areas respectively that the first "Bombardons" could be placed the next day⁴.

That afternoon a start was made in sinking the blockships to form the "Gooseberry" shelters—an operation witnessed in "Sword" area by Rear-Admiral Tennant, who visited the assault area in H.M.S. *Versatile*.

¹ In August, 1943, Major-General Sir Harold Wernher had been appointed Co-ordinator of Ministerial and Service Facilities, and charged with ensuring that the "Mulberries" met the requirements of the Supreme C-in-C. Captain H. Hickling, D.S.O., R.N., and Colonel E. V. Daldy were responsible that the Admiralty and War Office were kept fully informed of the progress made and the demands which would be made on them.

² This was a separate appointment in the American Organization, Captain Clark being responsible for construction only. Captain Hickling, hitherto C.S.O. to R.A.M./P., was appointed to succeed Captain Petrie as N.O.I.C. on 22nd June, with headquarters ashore at Arromanches.

³ Mulberry tows used special routes, known as "P," "Q" and "O," from St. Alban's Head, Selsey and Dungeness respectively direct to a point just north of the German mine barrier (Lat. 50° 03' 30" N., Long. 0° 37' 30" W.) and thence via channel 56 to the assault area.

⁴ This by no means completed the activities of the Boom Defence mooring vessels, which then entered upon an extensive programme of laying moorings in the Mulberries and Gooseberries for depot ships, liberty ships, coasters, floating docks, small craft, etc., as well as special "Tombola" moorings required for Operation "Pluto."

On the 8th June (D+2) the first "Whale" tows sailed at 0330 and from then on both "Phoenix" and "Whale" tows sailed daily, except when prevented by the weather. Such interruptions were frequent, especially as regards the latter, which were a constant anxiety throughout the operation¹.

By D+3 (9th June) the survey off Arromanches had been completed. Off St. Laurent it had been delayed by underwater obstacles and snipers, but was by this time progressing². "Phoenixes" were being sunk in both "Mulberries" and the centre "Whale" pier in "Mulberry B" had been commenced.

At the end of 10 days (16th June) both harbours were taking shape. The "Bombardons" had been completed (D+8), and were giving good results, with a wave suppression of about 40 per cent. Good progress had been made with the "Phoenix" breakwaters, which were about half completed. In "Mulberry A" the centre "Whale" pier was completed and the L.S.T. pier-head connected; two pierheads were available for traffic in "Mulberry B," where the rate of discharge had steadily increased from 600 tons of stores on D+6 to 1,500 tons on D+10. The other piers in both harbours were well in hand.

Losses on passage, however, both from weather and enemy action, had been considerable. Five "Whale" tows and two "Phoenixes," besides two tugs had been lost, and on the 12th June Rear-Admiral Tennant issued the following directions:—

- (ii) All tows to do the passage south of Lat. 50° 10' N. by daylight.
- (ii) Tows from Dungeness to use the normal coastal channels to Long. 0° 37½' W., and thence south along the route from Selsey.
- (ii) "Whale" roadway tows not to be sailed when the wind was force 4 or above from south of west.

Although the enemy was slow to grasp the significance of the "Mulberries," measures for their defence were taken from the first. Strong A.A. defences of heavy and light guns were mounted on shore and on the "Phoenix" units. The latter proved invaluable for providing a barrage over the pier heads and other vulnerable points of the harbour installation.

Smoke screening also was provided by 60 trawlers fitted with "Esso" generators. These were organized in groups of 15, one group being always available at each "Mulberry," while the other two groups were replenishing with smoke oil and servicing at Portland ("Mulberry A") and Southampton ("Mulberry B")³.

¹ Out of the first 42 days of the operation only 15 were considered suitable for sailing the "Whale" roadways. "Their towing arrangements had not been prepared by seamen and were scarcely adequate for towing from Southampton to Peel Bank. Heavy losses by weather were experienced and eventually every opportunity of transporting the links by landing ship (dock), car floats, etc., was taken. Towing of these links was finally resorted to when no other means of transport was available, though with modifications to design much could be done to make these tows more seaworthy." R.A.M/P. Report, Appendix, p. 3, para. 20.

² During the planning period, preliminary surveys had been carried out by reconnaissance parties, who swam in at night and, working under the noses of the German sentries, obtained invaluable information as to soundings, tides and the nature of the bottom. This information was used to check the Admiralty Chart of the locality (based on a survey dated 1836) on which the layout of the Mulberry harbours was planned. It was remarkable how closely the finished harbour followed the final arrangement as planned.

³ Admiralty approval for the withdrawal of these trawlers from the fishing grounds was given on 27th March after the receipt of the detailed Army requirements for smoke screens. They were then based at Hopetoun (Port Edgar), where they were fitted out for smoke screening at highest priority, and training and working up was carried out under Acting Commander J. O'B. Milner-Barry, R.N.

H.D.M.L. patrols around the outer anchorage and L.C.V.P. patrols in the harbour entrances were maintained as a counter to midget submarines and human torpedoes. The shallow water in the approaches rendered U-Boat attack unlikely, and against surface attack (destroyers and E-Boats) reliance was placed on the outer patrols of the assault area (see Sec. 58).

With regard to Operation "Pluto," surveying operations off St. Honorine and Port en Bessin had been started as soon as the military situation on shore permitted (D+2), in order to confirm the feasibility of the projected sites. This reconnaissance was conducted by the Senior Officer, "Pluto" (Captain Hutchings), accompanied by Captain Eagle, R.N.R. (S.O. "Pluto," 2nd Division)¹ on whom the actual laying of the "Tombola" pipes would devolve. By D+6 it was decided that both sites were possible, though that at Port en Bessin presented great difficulties owing to off-shore snags, and three days later (D+9, 15th June), the 2nd Division, "Pluto," sailed for the far shore.

Almost immediately on their arrival the weather started to deteriorate; this considerably hampered their work, but the first line was completed on D+19 (25th June), only one day behind the target date².

64. Naval Activity in the Assault Area (7th-16th June, 1944)

While the initial stages of the build-up were thus proceeding as planned, the enemy—as had been anticipated—was intensifying his attacks on the assault area and the cross-Channel routes. Some account of his attempts on the latter will be found in the next section; suffice it to say here that all his efforts were held in check.

Against the assault area, German activities by day—apart from the one long-range torpedo attack which sank the *Svenner* early on D-day—were limited to air attacks. These were made by small numbers of aircraft and their frequency decreased in the face of the Allied air superiority; they achieved no success against shipping and were described by Rear-Admiral Vian as "purely of nuisance value."

By night the enemy was more enterprising. E-Boats³ sortied nightly from Cherbourg, but they usually concentrated their efforts against the cross-

¹ H.M. Trawler *Grampian*.

H.M. Trawler *Cedar*.

H.M. M.F.V. 81.

H.M. M.F.V. 118.

H.M. C.B. *Gold Bell*.

H.M. C.B. *Gold Drift*.

One Diesel passenger launch, one motor boat (for diving party).

² See also Sec. 68.

³ The German naval plan was broadly as follows:—

5th and 9th M.T.B. Flotillas (Cherbourg), minelaying and torpedo attacks on assault area (mainly U.S. sectors) and on the "West Wall."

4th (Boulogne) and 2nd (Ostende, moved to Boulogne 7th/8th June) minelaying off Ouistreham and torpedo attacks in E.T.F. area and on the "East Wall," putting in to Havre or Cherbourg as convenient.

8th (Ymuiden, moved to Ostende 7th/8th June), patrol eastern part of the Channel.

6th M.T.B. Flotilla (Finland) was ordered to the invasion area 11th June.

The four torpedo boats based at Havre were to carry out minelaying operations and torpedo attacks in the eastern Seine Bay; at an early stage their activities were cramped by a shortage of torpedoes at Havre. These plans had to be modified in the event owing to the impossibility of penetrating into the assault area, to which frequent reference occurs in Admiral Krancke's War Diary.

Channel traffic, and though on occasions they entered the American area under the lee of the Cotentin Peninsula and laid mines, they never succeeded in penetrating the area screen to attack ships in the anchorage. Their only definite success lay in the torpedoing of the U.S. destroyer *Nelson* on 12th June¹.

On four occasions he operated torpedo boats from Havre and on eight occasions E- or R-Boats in the British assault area. On every occasion save one these forces were intercepted and driven off.

In these encounters, while Allied casualties were negligible, several E/R-Boats were sunk and damaged in varying degree, besides two of the torpedo boats; in addition losses were incurred outside the assault area and the German forces were appreciably reduced. It fell to the Royal Air Force, however, to administer the severest check to his activities.

By the 14th June there was a considerable concentration of E-Boats at Havre, and that evening, at the request of A.N.X.C.F., Bomber Command carried out a heavy attack on the port just before dusk². Eighteen Mosquitos and 335 Lancasters took part, dropping 1,026 tons including 22 12,000-lb. special bombs. The raid was most successful; three torpedo boats (*Folke*, *Jaguar* and *Moewe*), 10 E-Boats, 2 R-Boats, 15 minesweepers and patrol vessels, 3 landing craft, 1 gun carrier and 5 tugs were sunk; 4 E- and 4 R-Boats badly damaged and 1 torpedo boat (T.28) and 8 minor craft slightly damaged.

"The attack on Havre is a catastrophe," wrote Admiral Krancke the following day. "Losses are extremely heavy. It will hardly be possible to carry out the operations planned with the remaining forces. The loss of the torpedo boats and the M.T.B.s is especially bitter. . . . Naval situation in Seine Bay has completely altered since yesterday's attack on Havre and increasing difficulties in supplying Cherbourg by land and sea"³.

Next day it was Boulogne's turn. That night (15th/16th) 285 heavy bombers and 12 Mosquitos dropped 1,463 tons of explosive on the port area; a large proportion of the harbour facilities, including the floating dock, were damaged and 3 R-Boat depot ships, 8 R-Boats and some 20 other craft were sunk.

These in the aggregate were indeed crippling losses⁴ and though some

¹ This gave rise to the rumour—which in due course reached the enemy—that the British Battleship *Nelson* had been torpedoed. H.M.S. *Nelson* did suffer damage from a mine about a week after this incident.

² By a fortunate chance a ban had been imposed on A.A. fire between 2245 and 2330 that evening at the request of the German Air Force to safeguard their own operations.

³ War Diary of Naval Group Command, West, June, 1944.

⁴ The following table shows the German Naval losses from all causes between D-day and D+10 (16th June) as extracted from the German War Diary:—

Dates.	De- stroyers.		T.B.s.		M.T.B.s. (E- Boats).		M.M.S. (R- Boats).		Gun Carriers.		H.D. and Patrol Vessels: M/S, etc.		Remarks.
	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)	(S)	(D)	
6th - 14th June.	2	1	—	—	6	10	4	4	5	—	7	9	
Air Attack, Havre, 14th June.	—	—	3	1	10	4	2	6	1	2	15	4	3 landing craft, 5 tugs sunk.
Air Attack, Boulogne, 15th June.	—	—	—	—	—	—	8	1	3	—	8	5	3 R-Boat depot ships, 3 tugs sunk.
Total ..	2	1	3	1	16	14	14	11	9	2	30	18	

(S) = Sunk.

(D) = Damaged.

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nights later (18th/19th June) six E-Boats were moved to Havre from Boulogne, their offensive operations were thereafter mainly confined to minelaying.

The most serious menace to the assault area proved to be night air attack. On every night except one (26th/27th June) between 6th and 30th June enemy aircraft were over the area. Their tactics consisted of low flying attack by single aircraft, up to 50 in any one night, some of which dropped bombs, but the majority mines, chiefly of the "Oyster" type.

The bombing attacks achieved but little. In the British area H.M.S. *Bulolo* was damaged on D+1 (see Sec. 59 *ante*) and H.M.S. *Lawford* was sunk in the early hours of D+2 (8th June) while carrying out the duties of Captain of Patrols: apart from that only five ships in the British and one in the American area suffered bomb damage during the remainder of the month¹.

Far more serious was the air mining offensive, which, in conjunction with mines already laid (which periodically "came to life") and a certain amount of mining by surface craft, levied a heavy toll on Allied shipping. Defence against the low flying aircraft proved most difficult, as radar could not pick them up in sufficient time for Allied fighters to intercept them². The enemy also introduced two new types of mines, both of which were actuated by the reduction of pressure caused by a ship passing over them³. One of these could not be swept under any conditions, and the other only when the weather was suitable; in any case the problem of sweeping ground mines in the congested anchorage presented great difficulties⁴.

In spite of the surprise use of the new weapon and of the consequent comparatively ineffective sweeping, casualties in the British area remained remarkably low for the first ten days, eleven vessels only, including the hospital ships *Dinard* and *St. Julian* (D+1) and H.M.S. *Rattlesnake* (D+9), being mined; of these the Trinity House vessel *Alert* was the only one sunk. In

¹ Vessels damaged by bombs in assault area, June, 1944:—

Date.	Ship.	Remarks
7th June ..	H.M.S. <i>Bulolo</i> ..	Damaged: remained operationally fit.
8th June ..	H.M.S. <i>Lawford</i> ..	Sunk.
9th June ..	<i>Chant 6</i> ..	Set on fire, subsequently sank.
9th June ..	L.C.H. 317 ..	Damaged.
10th June ..	M.T. ship <i>Fort Pic</i> ..	Damaged.
	S.S. <i>Charles Morgan</i> ..	Sunk (U.S. area).
18th June ..	M.M.S. 7 ..	Damaged.
24th June ..	H.M.S. <i>Nith</i> ..	Damaged.

² This form of attack was conducive to cases of A.A. fire indiscipline in both the British and American area. The situation was much aggravated by the extremely low cloud base which prevailed on most days, forcing the Allied aircraft to fly very low, thus giving the minimum time for recognition. The appointment of Royal Observer Corps personnel to merchant ships helped in this matter, and stringent orders as to withholding fire effected an improvement in the later stages of the operation.

³ "The Bomb Disposal Officer (Lieutenant (Sp) J. F. Thomas, R.N.V.R.) attached to N.O.I.C. 'Sword's' staff was responsible for discovering one of these mines, which had fallen behind the beaches and buried itself amongst some wrecked houses in Rivabella. His quick appreciation of the importance of his find resulted in the vital parts being flown back to H.M.S. *Vernon*, and the counter-measures, now in force, being promulgated with such promptness." A.N.C.X.F. Report, Vol. 2, Report by N.C. Force "S," p. 30.

⁴ "An effective counter to this form of attack, whether by sweeping or A.A. defence, was not in sight up to the time of my departure, and this problem I gladly left to my successor." A.N.C.X.F. Report, Vol. 2, Report by N.C.E.T.F., p. 3.

the American area during the same period losses were much more severe, three, possibly four, destroyers (*Meredith, Glennon, Rich, Corry* (?) and two minesweepers (M.M.S. 229 and *Tide*) being sunk and 25 other ships and craft damaged¹. All these casualties occurred in "Utah" area or approaches; Force "O," for some reason which Rear-Admiral Hall was unable to determine, while "duly appreciative of his good fortune," was completely free of mining and mine damage².

"Of the gun—the weapon apparently most available to him—particularly against the exposed eastern flank, the enemy made less use than might have been expected, on account no doubt of the fire from the eastern bombarding squadron. Under the resolute leadership of Rear-Admiral A. G. Talbot, D.S.O., the build-up was continued on these beaches with inconsiderable losses until it was convenient to the army to receive vehicles and stores elsewhere³." The build-up in "Sword" area was, however, retarded and damage from time to time was suffered; for example, on 15th June six L.S.T. were dried out together, when they came under most accurate fire, resulting in five of them being hit. All unbeached successfully after effecting repairs.

Far more effective was the Allied naval counter-battery fire and bombardment in support of the army. Space does not allow of a detailed account of this aspect of the operation⁴. "From D-day onwards battleships, monitors, cruisers, destroyers and L.C.G.(L) engaged enemy targets ashore until our armies had advanced beyond the range of their guns. Ships and craft on both flanks engaged coast defence batteries when these fired on our shipping or at the beaches. A large, but carefully controlled amount of ammunition of all types was expended; replenishment at the home ports was carried out rapidly. . . . Spotting by fighter spotters, air O.P.s, S.F.C.P.s and F.Os.B. was very successful, though there were some failures in communication between F.Os.B. and ships, particularly in the early stages⁵." These were in part due to the natural tendency to land F.Os.B. too early in the assault, which caused damage to their equipment and a high percentage of casualties.

"By common consent the shooting was uniformly good, and it was considered that the initial advances inland of our armies were helped in no small measure by the naval supporting fire⁶."

It is interesting to note that prior to the bombardment of Cherbourg—a special operation undertaken on 25th June (see Sec. 69)—not a single hit was scored by the enemy shore-based guns on any of the bombarding ships. This

¹ See Appendices "J" and "K," Shipping Casualties and Mines Destroyed and Casualties.

² A.N.C.X.F. Report, Vol. 3, Report by N.C. Force "O," p. 65.

³ A.N.C.X.F. Report, Vol. 2, Report by N.C.E.T.F., p. 3.

⁴ *BR 1736(39)* (February, 1945) "Gunnery Review, Normandy Bombardment Experience" deals with this subject.

⁵ A.N.C.X.F. Report, Vol. 1, p. 14.

⁶ *Ibid.* This opinion has been amply confirmed from German sources. Admiral Krancke, for example, writing on 20th June remarked: "It is generally accepted that the intended offensive by the German Army has no chance of success unless the exceedingly effective shelling by enemy naval guns of our own land units can be prevented⁷. The German Navy is not capable of making an attack. The G.A.F., which is numerically just as inferior, also refuses to attack naval targets by day. As the battleships move away from the coastal area at night, there appears to be no solution." War Diary of Naval Group Command, West, June, 1944.

⁷ Author's italics.

was ascribed to the air attacks on the coastal batteries during the three months prior to D-day and the night of D-1/D-day; the effect of the naval bombardment itself, and to the measures taken to prevent the enemy from ranging and spotting by the use of smoke-screens and radar counter-measures. "The important lesson to be learnt is that duels between ships and coast defence guns are quite legitimate provided some or all of the above precautions are taken; owing to the prevailing conditions, it was not possible to take the necessary precautions before and during the bombardment of Cherbourg, with the results that ships were damaged by coast defence guns¹."

65. Operations in English Channel, 7th-16th June, 1944

Against the cross Channel routes the enemy's efforts met with little better success than those against the assault area, though occasional losses necessarily occurred. With 16 convoys and about the same number of landing craft groups at any one time at sea, exposed to attack by mines, E-Boats, aircraft and U-Boats, it was obvious that each day a number of actions of different types would be fought and that both sides would suffer casualties and damage. "The salient fact, however, was that no matter how the enemy attempted to sink our ships, he was fought, and generally with success. The casualties that we sustained were relatively light, when the very large number of ships taking part is considered²."

Surface operations.—As already mentioned (Sec. 59 *ante*) E- and R-Boats carried out operations against the "Spout" on the night of D/D+1: these attacks continued on an increasing scale each night for the first week or so after the landing. After the air attack on Havre on 14th June (D+7) they eased off; bad weather then intervened till 22nd June, and for the remainder of the month operations were mainly confined to attempts to relieve the rapidly deteriorating situation at Cherbourg and to minelaying.

On the night of 7th/8th June (D+1/D+2), Allied patrols, similar to the two previous nights, were disposed to guard the "Spout." It was a clear night with extreme visibility and a moderate sea. Seven actions with E-Boats took place between the patrols controlled by the *Stayner* and *Retalick* off Cape Barfleur; the British forces were hampered by the proximity of the mined area off Cherbourg on the one side and the Western Task Force area on the other, and actions had sometimes to be broken off, but damage was inflicted on the enemy³.

A group of about eight E-Boats attacked a convoy of L.C.T.s and L.C.I.(L)s. escorted by M.L. 903 (Lieutenant J. C. Lewis, R.N.V.R.). "M.L. 903 defended

¹ A.N.C.X.F. Report, Vol. 1, p. 64.

² A.N.C.X.F. Report, Vol. 1, p. 15.

³ These E-Boats belonged to the 5th and 9th German M.T.B. Flotillas working from Cherbourg. According to Admiral Krancke, five boats of the 5th Flotilla penetrated the American area as far as the St. Marcouf Islands, when they claimed torpedo hits on formations of cruisers and destroyers. No such attack was reported by the Americans. On their way back to Cherbourg these E-Boats fell in with the Cape Barfleur patrol; three E-Boats suffered damage. The 9th Flotilla operated against the "Spout" up to about 20 miles to the eastward of Cape Barfleur. They also reported several actions; two E-Boats were damaged.

Two E-Boats were subsequently mined and sunk off Cherbourg.

the convoy with gallantry and spirit for two hours, supported by the fire of the L.C.T.s and L.C.I.(L)s. Two craft were lost and one damaged, but considering the scale of the attack, the defence put up by the single escort was highly creditable¹.

To the eastward the *Obedient* had a brush with E-Boats² which made off to the south-westward, some 40 miles south of Beachy Head.

The next night (8th/9th June) E-Boats again succeeded in reaching the "Spout." One group was driven off by H.M.S. *Watchman*, who was escorting Convoy E.B.C.3, but two U.S. L.T.S.s in Convoy E.C.M.1P were sunk about 18 miles east-north-east of Cape Barfleur, 250 survivors being rescued by H.M.S. *Beagle*. E/R-Boats detected by H.M.S. *Trollope* were engaged by M.T.B.s of the Dover Command to the northward of Cape D'Antifer, till the latter were driven off by shore batteries.

The outstanding event of this night, however, was the elimination of the "Narvik" Destroyer Flotilla. After effecting repairs in Brest (*see* Sec. 59 *ante*), the flotilla had put to sea at 2015, 8th, and was reported steering north-east from Ushant.

At 0130, 9th June, the destroyer patrols to the westward of the "Spout" under Captain (D) 17—*Onslow*, *Oribi*, *Offa* and *Onslaught*, reinforced by the *Scorpion* and *Scourge*—were redispensed to meet this threat. The precaution, however, proved unnecessary. During the previous day the Commander-in-Chief, Plymouth, had concentrated the 10th Destroyer Flotilla (*Tartar*, Commander B. Jones, Senior Officer, *Ashanti*, *Haida*, *Huron*, *Blyscawica*, *Eskimo*, *Piorun*, *Javelin*) north-east of Ushant; guided by air reports, these made contact with the German flotilla 20 miles north-west of the Isle de Bas at 0120, 9th June. In the ensuing action the ex-Dutch destroyer *Tjerk Hiddes* was sunk; one "Narvik" (Z.32) was driven ashore and totally wrecked on the Isle de Bas; the other "Narvik" (Z.24)—considerably damaged—and the "Elbing" (T.24) succeeded in escaping to Brest³.

The enemy destroyer threat being thus disposed of, the destroyer patrols were discontinued and offensive sweeps to intercept supply convoys or the undamaged "Elbing" on passage from Brest to Cherbourg were carried out off the north coast of Brittany for the remainder of the month. Since E-Boat dispositions did not seem to menace the Plymouth Command, the 1st M.T.B. Flotilla was transferred to the Portsmouth Command on the 9th June.

E-Boats continued their activities nightly for the next four days, and in the frequent actions which took place, losses and damage were suffered by both sides; on the 9th/10th two ammunition coasters⁴, the *Brackenfield* and *Dungrange*, were torpedoed and sunk in the "Spout," two survivors from the

¹ Report on Operation "Overlord," Portsmouth Command, Part III, para. 22. These E-Boats were probably part of the 9th M.T.B. Flotilla.

² Probably part of the 4th M.T.B. Flotilla on passage from Boulogne to attack the "East Wall." This flotilla claimed to have sunk, later that night, four landing craft out of a group of 20 (position not stated), but no such incident appears in the British reports. Having fired all their torpedoes, they proceeded to Havre, engaging their own 15th Patrol Flotilla with gunfire—apparently ineffectually—off Cape D'Antifer, on the way.

³ Z.24 was not ready for action till 30th June. By that time the strength of the British forces off the north coast of Brittany decided Admiral Krancke not to attempt to employ her in the Channel, and with T.24 she was ordered to La Pallice.

⁴ This attack was made by four E-Boats of the 2nd M.T.B. Flotilla from Boulogne. These boats, which had previously fired torpedoes at a northbound convoy without success, afterwards put in to Havre.

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former only being picked up ; on the 10th/11th H.M.S. *Halstead*¹ had her bows blown off by a torpedo, and one merchant vessel, two tugs towing " Whale " units, a rescue tug and the U.S. tug *Partridge* were sunk. Several engagements occurred off Cape Barfleur, in the course of which M.T.B. 448 and one E-Boat were sunk ; another E-Boat was damaged by aircraft. Off Cape D'Antifer M.T.B.s of the Dover Command again engaged E/R-Boats on 9th/10th, and on 10th/11th H.M.S. *Seymour* was engaged by friendly destroyers in the same area².

On the 11th/12th two E-Boats were damaged by H.M.S. *Talybont*, and a " Phoenix " unit was torpedoed and sunk. The patrols off Cape Barfleur were repeatedly and accurately shelled by shore guns on this and other nights H.M. Ships *Melbreak* and *Trollope* had indecisive engagements with enemy craft north of Cape D'Antifer.

The 12th/13th was the last night on which E-Boats operated at full strength. It was not their lucky night. Hampered by poor visibility, they only succeeded in making contact with patrols. The *Onslow* and *Vidette*, *Camrose* and *Baddeck*, and *Melbreak*, *Wensleydale* and *Brissenden* encountered different groups, in the course of which two E-Boats were damaged ; and early on the 13th, three E-Boats were sunk by fighter bombers while returning to Boulogne³, as well as an R-Boat which went to their assistance.

E-Boats did not operate on the night of 13th/14th June, owing to unsuitable weather. Two satisfactory actions with M-class minesweepers occurred, however. M.T.B.s 704 (Lieutenant H. Ascoli, R.N.V.R., Senior Officer) and 714 engaged three of these craft off Cape de la Hague, sinking one with a torpedo and damaging another, despite accurate shelling from shore batteries during their attack. Further south, the German 24th Minesweeping Flotilla, which was transporting torpedoes from St. Malo to Cherbourg, had the misfortune to fall in with O.R.P. *Piorun* and H.M.S. *Ashanti* west of Jersey : one minesweeper was sunk, another beached and the remainder of the flotilla badly damaged and put out of action⁴.

The following night (14th/15th June) the air attack on Havre (Sec. 64 *ante*) imposed a check on the enemy's operations.

Meanwhile, the submarines were beginning to come into the picture.

¹ The *Halstead* was towed back to Portsmouth successfully.

² In order to give the Vice-Admiral, Dover, a little more sea room in which to operate his forces in this critical area where Portsmouth, Dover and the E.T.F. areas met, the boundary between the two former commands was altered at this time as follows :—

From Cape D'Antifer to position Lat. 49° 40' N., Long. 0° 12' W. (*i.e.* 8 miles to the westward) thence to Lat. 50° N., Long. 0° 15' W. and thence as before to Worthing (*see* Plan 3).

This new boundary did not prove entirely satisfactory, especially when later on the position was further complicated by the operation of A/S Groups close east of the " Spout " and in order to provide a more co-ordinated control of patrols in this area, the boundary was again altered on 27th June, this time well to the eastward, and ran as follows :—

Beachy Head to position Lat. 50° 37' N., Long. 0° 25' 42" E. thence to Lat. 50° 30' N., Long. 0° 30' E. and thence 180° to the French coast.

³ There was a shortage of torpedoes at Havre, and for this reason as well as German fears of another landing in the Pas de Calais, the 2nd and 4th Flotillas of E-Boats continued to be based at Boulogne. The operations of the Havre torpedo boats were hampered by this shortage of torpedoes.

⁴ The Germans reported their opponents as one cruiser, four or five destroyers,

Submarine Offensive.—As a precautionary measure, the Germans had held 36 submarines—known as the “Landwirte” Group—in readiness to attack invasion shipping as soon as the Allies were committed to a major landing. The first six of these submarines (all fitted with Schnorkel¹) left Brest on D-day for an area roughly halfway between the Needles and Cape de la Hague²; by the close of the day, all 36 had put to sea. Of these, as mentioned previously (Sec. 59 *ante*), 14 were sighted and eight attacked by aircraft that night.

The Allied anti-submarine measures quickly proved their worth. Within 48 hours the “Landwirte” Group had suffered a severe reverse. Coastal Command, reinforced by six squadrons of the Naval Air Arm, operated what Air Chief Marshal Sir Sholto Douglas described as “a solid wall of air patrols” in the south-western approaches; the area covered was sufficiently wide to ensure that the U-Boats could not get through it without surfacing and there were sufficient aircraft to ensure that no U-Boat which did surface could avoid detection. In the first 48 hours there were 33 sightings and 22 attacks; of the 36 “Landwirte” submarines, two were sunk (U.955 and U.970) and seven damaged and forced back to port—a reduction of 25 per cent.³ The U-Boats which still tried to get through were forced to remain submerged continuously and to rely on Schnorkel—tactics which severely restricted their speed and freedom of manoeuvre and had a most distressing effect on their crews. U.629 and U.373 were sunk on the 8th June, U.740 on 9th, U.821 on 10th and on 12th June (D+6) all submarines operating without Schnorkel in the Bay of Biscay were ordered to return to their ports and remain there under shelter⁴.

The anti-submarine escort groups, too, were active, shifting their positions to keep pace with the estimated movement of the U-Boats up Channel, though owing to exceptionally bad asdic conditions they did not achieve many “kills” during the opening stages. On D+1 (7th June) it was decided that the threat to the south coast convoy route was negligible and the two escort groups in that area were moved down to the area north of Ushant. The first surface contact was made by H.M.C.S. *Restigouche* (E.G. 12) at 2000 that evening, in Lat. 48° 45' N., Long. 5° 45' W. (about 25 miles north-west of Ushant). In the course of the next three days no less than eight torpedoes were fired at this group, which was frequently engaged with submarines, but without obtaining definite results.

On 8th June the patrols were redispensed, the four escort groups being placed mainly at the western end of the up Channel route, but covering the centre of the Channel as far as Long. 4° 05' W. That evening the report that the “Narvik” Destroyer Flotilla was on the move necessitated the clearance of all escort groups from their route; incidentally, 141 survivors from one of these destroyers were picked up by the 14th Escort Group next day, by which time the A/S patrols had moved east as far as Long. 2° 22' W.

By the 10th June (D+4) it was appreciated that the U-Boats could have reached the line Portland–Cape de la Hague or the convoy routes in the western Channel. Two escort groups from the Western Approaches (the 2nd and 5th)

¹ Only seven submarines of the Landwirte Group were fitted with Schnorkel.

² German grid square 3180. Lat. 50° 06' N. to 50° 24' N. between Long 1° 30' W. and 2° 00' W. The area for the Schnorkel boats was shifted on 9th June about 40 miles east-south-east, *i.e.* to the central portion of the “Spout” From German Naval War Staff Diary, Part A, Vol. 58.

³ From German Naval War Staff Diary, Part A, Vol. 58.

⁴ *Ibid.* Only if an Allied landing on the Biscay coast seemed imminent were they to operate.

were allocated to the Plymouth Command, and ordered to the north Cornish Coast and Lizard-Scillies area respectively. A barrier south of Portland was established with one group, and another group was placed to the westward of it, close enough to reinforce if required. The 11th Escort Group—then on its way to the Portland area—was transferred to the Portsmouth Command, and stationed west of the "Spout." These stations were maintained until 13th June, when one group was placed off Ushant, one south of the Start, and one south of Portland, the two remaining groups being retained off the Cornish coasts.

Two days later (15th June) the U-Boats achieved their first success. H.M.S. *Mourne* while hunting with the 5th Escort Group was torpedoed and blew up 45 miles north of Ushant (Lat. 49° 12' N., Long. 5° 24' W. approx.) and the same evening H.M.S. *Blackwood* was torpedoed some 20 miles north-north-west of Cape de la Hague (Lat. 50° 07' N., Long. 2° 15' W.); she sank while in tow on the way back to Portland.

On 16th June it was considered that the speed of the U-Boats generally had been over estimated and it was decided to shift the barrier to the Plymouth-Ile de Bas line. Such U-Boats as had penetrated the Channel were known to be using St. Peters Port, Guernsey, as their base, and before the new line was manned, dispositions were made to cover these exits.

Though reports of submarines in the "Spout" had been frequent since 12th June, no attacks had materialised against the invasion shipping in this vital area, and most of the reports were eventually classified as "non-sub¹."

Air Attacks.—The activity of the German Air Force over the Channel was, as might perhaps have been expected in view of the Allied air superiority, practically nil. Gone were the halcyon days of Crete and the Malta convoys. On one occasion only during the period under review did it operate; during the night of the 12th/13th June, torpedo bombers attacked the 14th Escort Group south of Lyme Bay (Lat. 50° 11' N., Long. 2° 53' W.), without inflicting any damage. They succeeded, however, in torpedoing H.M.S. *Boadicea*, which was escorting a westbound convoy off Portland. The ship was struck in the magazine and blew up; there were only 12 survivors.

Per contra, the Allied air activities both against the U-Boats in the West and shipping in the east were unceasing. Enough has been said to prove the efficacy of the former; to the latter, occasional reference only has been made, but throughout the period Beaufighters, Wellingtons, Albacores and Swordfish maintained standing patrols and not a night passed without attacks on enemy coastal shipping, patrols or E-Boats. On special occasions their attacks were supplemented by Typhoons as opportunity offered.

The material damage is difficult to assess² but the moral effect of these reiterated attacks undoubtedly contributed in no small degree to the ultimate collapse of the German surface defensive.

¹ It was not until 28th June (D+22) that the U-Boats obtained any success in the "Spout."

² "Claims to sinking of E-Boats were made by Beaufighters, Wellingtons and Albacores to a total of nine and a large number were hit and damaged, some seriously." Dover Command War Diary, General Appreciation, 1st-15th June, 1944.

According to Admiral Krancke's War Diary, though there is frequent mention of air attacks, three E-Boats and a minesweeper only were sunk and two E-Boats were damaged during this period.

In addition two Fleet Air Arm squadrons of Avengers based on Hawkinge carried out regular patrols during daylight hours, and Swordfish provided smoke screens for convoys as and when required.

66. General Situation, 16th June, 1944.

(Plan 14)

Meanwhile on shore the army had been successful in extending and consolidating the bridgehead.

In the American sector the VII and V U.S. Corps joined up on 10th June (D+4); Carentan was captured on the 12th and, further north, progress was made towards Montebourg.

On 10th June the V Corps advanced south across the Carentan-Bayeux road, making contact with the British 30th Corps next day, and quickly clearing the Forest of Cerisy, secured Caumont on 14th June.

On the British front, enemy tanks were in contact all along the line, but appreciable progress was made everywhere except north-east of Caen. On the right, Bayeux had been captured on 7th (D+1) and the 30th Corps, conforming to the U.S. advance, thrust south to positions north and north-west of Tilly-sur-Seulles, which, however, succeeded in holding out.

On the 1st Corps front the enemy was building up his armour, which delivered several counter-attacks east and west of the Orne without success. East of the Orne, the British position was improved by the capture of Breville (1½ miles east-north-east of Ranville) by the 6th Airborne Division on 13th June, by then reinforced by the 51st Division.

By 15th June the enemy had committed three panzer, one paratroop and two infantry divisions in attempts to seal off Allied penetrations. The First U.S. Army had six infantry, one armoured and two airborne divisions ashore and the Second British Army five infantry, one armoured and one airborne division. The stage was set, and on 16th June (D+10) the Allied armies went over to the offensive.

The naval situation at this time may be summarized as follows :—

Arrears of shipping had been worked off and the build-up arrangements were functioning smoothly in all areas. "Mulberry B" (Arromanches), though its construction was behind schedule, was dealing with 12 coasters daily, and three "Whale" pierheads were on the point of completion; "Mulberry A" (St. Laurent) was not quite so far advanced.

Enemy attempts at interference had been in vain, though shipping losses were being suffered from mines and in "Sword" area unloading was retarded by increased shelling; by D+9 (15th June) half a million men and 77,000 vehicles had been landed in France.

To sum up, the immense initial difficulties had been overcome and the whole vast organization was a running concern; preparations were being made to withdraw the Task and Assault Force Commanders and to put into force the more permanent organizations under Rear-Admiral Rivett-Carnac in the British assault area and Rear-Admiral Wilkes, U.S.N. in the American.

On shore, the offensive started with a drive by the American 1st Army to the west to cut the Cherbourg Peninsula, as a first step towards the capture of the port itself; by the evening of the next day (17th June) the 9th Infantry

Division had reached Barneville-sur-Mer on the west coast. At the same time the V U.S. Corps attacked in the neighbourhood of Berigny (7 miles east of St. Lo); the town was captured but the high land to the south-west remained in enemy hands.

In the British area operations were directed to the capture of Caen, in order to provide a strong left flank for the bridgehead. Very bitter fighting ensued, and a month was to elapse before the town was fully occupied. The general line of the armies on the 16th June is shown in plan 14.

On this day His Majesty The King, attended by the Allied Naval Commander-in-Chief, the First Sea Lord (Admiral of the Fleet Sir Andrew Cunningham), the Chief of the Air Staff (Marshal of the Royal Air Force Sir Charles Portal) and the Chief of Combined Operations (Major-General Laycock), visited the assault area in H.M.S. *Arethusa*¹. In the course of the afternoon (16th June) His Majesty landed in "Juno" area, where he was received by General Montgomery; on re-embarking, he inspected the progress in the construction of Mulberry "B" and returned to Portsmouth that evening. Admiral Ramsay records that the visit gave "the greatest satisfaction and encouragement to all British Naval personnel on the far shore".²

For three days after the King's visit all went well; a larger number of build-up ships and craft crossed the Channel than at any period since the start of the operation; then, without warning, there broke on the open beaches and nascent harbours a violent northerly gale, which in four days wrought as much damage to the Allied shipping as had been hitherto achieved by the enemy in the whole campaign.

¹ His Majesty embarked at Portsmouth and the *Arethusa*, flying the Royal Standard, sailed at 0830, 16th June, escorted by H.M. Ships *Scourge* and *Urania*. The route was swept by the 16th and 143rd Minesweeping Flotillas.

² Apart from the periodical visits of the Supreme Commander, A.N.C.X.F., and the officers directly responsible for Operation "Neptune," there were many distinguished visitors to the assault area in the early stages. Amongst others the Prime Minister (the Rt. Hon. W. S. Churchill) and General Smuts visited the British area in H.M.S. *Kelvin* on 12th June, while the U.S. Chiefs of Staff (Admiral King, General Marshall and General Arnold) accompanied by General Eisenhower were visiting the American area in U.S.S. *Thompson*; General de Gaulle in the F.S. *La Combattante* on 14th June; the C.-in-C., Portsmouth, with Admiral Sir W. James (Chief of Naval Information), Lord Bruntisfield (Parliamentary Secretary to the Board of Admiralty) and Lord Reith on the 17th and the 1st Lord of the Admiralty (Rt. Hon. A. V. Alexander) with the 2nd Sea Lord (Admiral Sir A. Willis) on 24th June, and General Sosknowski in O.R.P. *Blyskawicka* on the 27th June.

VIII.—CLOSE OF OPERATION “NEPTUNE”

19th June–3rd July

67. The Northerly Gale

The weather from D-day onwards had never been what might reasonably have been expected for the time of the year and from the 14th June it deteriorated steadily. A moderate to strong wind hampered the cross-Channel “Mulberry” tows and the discharge of shipping off the beaches, while low cloud largely deprived the army of close air support. False hopes were raised by a temporary improvement during the night of 17th/18th June, but at 0330, 19th, the wind suddenly increased in strength from the north-east to force 4; by 0900, it was force 6, and at 1500 gusts of force 7 were being recorded and waves 6 feet high were sweeping the anchorages. For the next 36 hours this continued, the waves height averaging 8 feet.

In the British area all unloading in the anchorages ceased during the forenoon of the 19th, and ferry craft took refuge in the “Gooseberries” and at Arromanches. Some tonnage was, however, unloaded by D.U.K.W.S. from coasters inside the shelters and from L.B.V. which had been already loaded; four L.S.T. too were successfully beached, dried out and unbeached in “Juno” area during the day.

The sailing of the shuttle service from England was suspended, but 12 L.C.T. arrived in area “Juno” during the forenoon and were ordered to shelter in “Gooseberry” 4. There was not room for them all and 48 hours later seven of them had drifted ashore, six of which broke their backs. Owing to the congestion and heavy swell in the “Gooseberries” there were many casualties to landing craft. In addition a number of Rhinos went aground, and, as the tide rose, drove into the landing craft inshore of them, pounding them to matchwood.

Work outside the “Gooseberries” and Arromanches was still at a standstill next day (20th June) but on 21st (D+15) 14 L.S.T. successfully beached in “Juno” area, though the wind was still force 6; all had unbeached by dusk.

On the 22nd June the wind began to ease, but it was not until 2000 that evening that the ferry craft could work in the anchorage and unloading restart, though the beaching of L.S.T. had continued during the day.

The gale was a severe test for the “Gooseberries” and partly constructed “Phoenix” breakwaters. The former stood up to it well though some of the blockships settled and at high tide the seas were breaking right over them. Nevertheless they saved many hundreds of landing craft from shipwreck¹ and, where they had been well placed—close together with a slight overlap—as was the case off Arromanches, some landing was possible under their lee. The survival of the “Phoenixes” largely depended on the depth of water in which they were sunk.

¹ During the three days of the storm 155 ships and craft, in addition to ferry craft, found shelter in Mulberry “B.”

The "Bombardons" protecting both harbours broke adrift and sank, or driving to leeward, proved an additional danger to shipping. To obviate this, those that did not break adrift were removed¹.

In the American area, both "Gooseberry" No. 1—which lost all protective value—and the St. Laurent "Mulberry" suffered far more severely than did those in the British area. The "Phoenix" breakwaters collapsed and some 30 L.C.T. and other craft broke adrift and drove down on the piers completely wrecking the installation. When the gale subsided and the damage could be assessed, the state of the two harbours was as follows:—

Arromanches ("Mulberry B")

Minor damage to pierheads, pier remained intact.

Detached breakwater, four "Phoenix" destroyed, otherwise intact.

"Corncob" breakwater, one "Phoenix" destroyed at western extension.

Blockships undamaged.

St. Laurant ("Mulberry A")²

Pier completely wrecked.

Detached breakwater, two-thirds destroyed.

"Corncob" breakwater damaged, through the blockships sinking into the sand and shifting; two had broken their backs.

Damage to shipping was severe. In the British area, one L.C.T. capsized and six drove ashore and broke their backs; Chant 7 capsized and sank; L.S.T. 386, three coasters (*Westdale*, *Chelwood*, *Eldridge*), Chant 26 and H.M.S. *Colsay* were damaged by grounding. H.M.S. *Tasajera* dragged on to a "Gooseberry," H.M.S. *Diadem* collided with a Rhino and H.M.S. *Fury*, which had been mined, was driven ashore. In the U.S. area, five L.S.T., one L.S.I.(H),

¹ In addition to loss and damage to the equipment already in place, 22 tows of "Whale" roadway (rather over 2½ miles) had put to sea on passage, on the strength of a favourable weather forecast on the 17th; they reached the assault area, only to be sunk by the storm in sight of the harbour.

² Rear-Admiral Tennant summed up the reasons why the damage in Mulberry "A" was so much greater than that in Mulberry "B" as follows:—

- (a) "Mulberry 'A' was exposed to a more severe buffeting from the sea because it lacked natural protection such as the Calvados Shoals offered to Mulberry 'B'."
- (b) Gooseberry No. 2 blockships were planted without sufficient overlaps between ships; also, two large gaps were left in the breakwater.
- (c) The Phoenix in the outer breakwater were planted in excessively deep water, and generally not being constructed in sufficient strength, were unable to withstand the weight of water when heavy seas broke into them and filled them up.
- (d) The sand being deeper in the Mulberry 'A' area, the effect of the scour there was far more severe upon Phoenix and blockships alike than in Mulberry 'B'.
- (e) The 'Whale' piers had no further protection after the collapse of the Phoenix breakwater, and were wrecked by some 30 L.C.T. and sundry craft which unfortunately had been allowed to anchor to windward of and in too close proximity to the pier installation and, breaking adrift, came against the piers." R.A.M/P. Report, Enclosure 1, p. 4.

13 L.C.I.(L), about 50 L.C.T., four L.C.F. as well as several minor war vessels, were damaged in varying degrees¹. Ferry craft suffered specially heavily in both areas².

The result of the gale was to confront the task and assault force commanders with a very critical situation just at the time when their organizations were finally settling down and when it was hoped that they and their staffs might be withdrawn. It was decided that they would have to remain in the assault area until conditions were again normal.

From the naval point of view³ the most serious aspect was the stranding of about 800 craft of all types, most of which were damaged and neaped, as this caused an immediate shortage of ferry craft on the far shore. It was also soon apparent that the damage done to St. Laurent harbour was largely irreparable and, shortly afterwards, General Eisenhower decided that this harbour should not be completed, but that all remaining resources should be devoted to strengthening Arromanches to withstand winter conditions.

Energetic measures were taken to salve all the damaged craft possible. Sections of the port repair parties were landed from H.M. Ships *Adventure*, L.S.E.2 and *Albatross*, to carry out repairs to the stranded craft which littered the foreshore, piled high upon each other. About 250 additional hull repair ratings drawn from the Home Fleet and Home Commands, together with supplies of structural materials and 26 extra electric welding sets, were brought forward (as had been planned for such an emergency) and an additional repair ship, L.S.E.1, and a reserve port repair party were moved over to the assault area. The full salvage organization was mustered.

"Due to the energy and resource of all concerned about 600 stranded craft and a few coasters and other small vessels were temporarily repaired and refloated at the next spring tides, on 8th July. A further 100 were refloated a fortnight later⁴."

¹ These figures are approximate only.

² Rear-Admiral Vian listed the casualties to ferry craft in the British area (exclusive of Force "J" for which figures were not available) as follows:—

Type of Craft.	In British Assault Area.	Operationally Fit before Storm.	Operationally Fit after Storm.
L.C.T.	70	55	48
L.C.I.	17	14	16
L.C.M.	113	78	25
L.C.V.(P)	216	180	02
L.B.V.	63	62	40
Rhinos	22	14	2

No figures for losses of ferry craft in the American area are available.

³ "It is very difficult to estimate the total effect of the gale on the operation as a whole. An Army estimate was made which suggested that from 19th to 24th June inclusive the unloading loss due to the gale was in the neighbourhood of 20,000 vehicles and 140,000 tons of stores." A.N.C.X.F. Report, Vol. 1, p. 16.

The effect of the gale on the arrivals of shipping and craft in France during these days is shown in App. "H (2)."

⁴ A.N.C.X.F. Report, Vol. 1, p. 16.

The effects of the gale were not confined to the assault area. The numbers of damaged landing craft returning to the United Kingdom after the assault had been much greater than expected and their repair was already proving difficult in the Portsmouth area. The fresh influx proved too much and arrangements were made to increase the number of repairs undertaken in yards in the south-west and on the east coast. In this emergency "Corep"—the Combined Operations Repair Organization set up to cope with the demands of "Neptune"—justified itself; "without it, the distribution for, and early completion of the repairs of hundreds of ships and craft would have been entirely impracticable¹."

68. Continuation of Build-up and Naval Activities, 17th-30th June, 1944

As soon as the gale subsided (22nd June) the build-up recommenced. As regards the convoy movements, the plan had proved flexible and the arrangements for holding convoys and stopping the loading and sailing of others while the storm lasted had worked smoothly. Forty-eight hours after the wind had gone down the average number of ships arriving at the far shore before the interruption had again been attained. The resumption of unloading, however, and clearing the beaches of wreckage called for herculean efforts, especially in the American area, where the "Mulberry" plant was virtually destroyed and the "Gooseberries" had suffered heavy damage. "The speed and efficiency with which this recovery was made" wrote Rear-Admiral Kirk "were remarkable, and in succeeding weeks it was demonstrated that with the present technique, open beaches can be used in summer weather to handle the tonnage desired by the army²."

With the decision to discontinue work on the St. Laurent "Mulberry," work on that at Arromanches was pushed ahead, salvaged material from the former being used to complete the damaged piers, etc.; modifications were also put in hand with a view to prolonging its life into the winter months. The supply of labour was specially difficult at this time, when the repair of V-bombed houses in London³ was drawing heavily upon the national resources, but by great efforts the work was accomplished and—apart from the "winterization" modifications—the harbour was virtually completed by the 20th July. "Throughout the summer and autumn" wrote General Eisenhower "the achievements of the 'Mulberry' exceeded our best hopes, for although the planned rate of discharge was 6,000 tons a day, the actual average from 20th June to 1st September, was 6,765 tons⁴."

Force "Pluto" had withstood the gale well. The small craft had been able to shelter in Port en Bessin harbour, where, thanks to good seamanship and to their equipment they escaped serious damage and work on hauling the "Tombola" pipe lines on shore was resumed as soon as the weather moderated.

¹ A N.C.X.F. Report, Vol. 1, p. 16.

² A.N.C.X.F. Report, Vol. 3, Report of N.C.W.T.F., p. 8.

"At 'Omaha' beach the daily average of supplies unloaded from D-day to 30th September was 10,000 tons, the daily rate reaching nearly 12,000 tons for the critical period of July and August. At the smaller 'Utah' beach the daily average from D-day through September was 5,000 tons, and upwards of 750,000 men disembarked at this point." Report by the Supreme Commander, p. 67.

³ The first flying bombs fell in the United Kingdom during the night of 12th/13th June and regular attacks commenced three days later.

⁴ Report by the Supreme Commander, p. 69.

The operation called for close co-operation with the military engineers constructing the pipe on shore; this, Captain Hutchings remarked "both in the case of the British engineers and the Americans . . . was happy and effective." The first line off Port en Bessin was completed on D+19 (25th June), the second on D+38, while the two lines off St. Honorine were completed on D+26 and D+27 (2nd-3rd July)¹ their total capacity then being 8,000 tons a day in fine weather². In addition to these four lines originally planned three shorter lines were subsequently hauled on shore in three successive days at "Fox" Red beach at the eastern end of "Omaha" area in response to a request from the Americans.

The more ambitious project of running pipes right across the English Channel to Querqueville, was put in hand on the capture of Cherbourg. Here, again, bad weather hindered the work and naturally in so unusual an undertaking there were "teething troubles." Despite these the first "Hais" line was completed by 12th August and a second by the 21st August, though owing to leaks and stoppages they could not immediately be put into use³.

By about the 24th June (D+18) casualties to Allied shipping due to enemy mines were becoming serious⁴. This was apparently due as much to the ripening of mines that had already been laid as to new lays made by aircraft and coastal craft at night. During the first fortnight of the operation (7th-21st June) most of the losses had been in the American area, where about 10 warships and 24 other craft had been damaged⁵ as opposed to seven warships and four other craft⁶, in the British. In the third week of the operation (22nd-29th June) the American losses were reduced to one destroyer—U.S.S. *Davies*—but the British rose sharply to 12 warships and seven others⁷.

An early victim was H.M.S. *Scylla*, which was mined in the evening of the 23rd June in "Juno" area (Lat. 49° 24·7' N., Long. 0° 23·5' W.) while proceeding to her anchorage for the night. The damage was quickly brought under control, but the four L.P. casings of the turbines were cracked and she was unable to steam. Rear-Admiral Sir Philip Vian turned over the control of the Eastern Task Force to Vice-Admiral Dalrymple-Hamilton and transferred his flag to H.M.S. *Hilary* at 0030, 24th June, resuming command of

¹ The American eastern line was 4,400 ft. long, nearly 50 per cent. longer than any line previously hauled.

² This could have been substantially increased if the shore installations had been capable of receiving more. Report by R.A.M/P.

³ Subsequently further lines were laid over the shorter route from Dungeness to Boulogne. These provided the main supplies during the winter and spring, 1944-45 campaigns.

⁴ See App. "J," "J (1)," "K."

⁵ U.S. destroyers *Meredith*, *Glennon*, *Rich*, *Corry*, M/S *Tide*, F.S. *La Surprise*, two M.M.S., two Y.M.S., one transport, one M.T. ship, three L.S.T., 15 L.C.T., two L.C.I., one trawler, one tug. These figures (from N.C.W.T.F. Report), are a "close approximation."

⁶ H.M. ships *Nelson*, *Rattlesnake*, *Fury*, M.G.B. 17, M.T.B. 668, M.M.S. 113, B.Y.M.S. 2003, Hospital ships *Dinard*, *St. Julian*, S.S. *Viceroy*, T.H.V. *Alert* (sunk).

⁷ H.M. ships *Ilfracombe*, *Fairway*, *Persian*, *Glaidsdale*, *Scylla*, *Swift* (sunk), *Lord Austin* (sunk), *Arethusa*, *Pique*, M.M.S. 8 (sunk), M.M.S. 40 (sunk), M.G.B. 326 (sunk), M.T. ships *Fort Norfolk* (sunk), *Derrycunihy* (sunk), *Charles Elliot* (sunk), H.M.S. *Bachaquero*, and tug *Stella Rigel*, L.C.H. 185 (sunk) and one L.C.T. (R).

the task force in the morning. The *Scylla* was successfully towed back to Spithead that day and the control of the night defence measures hitherto exercised by her was taken over by H.M.S. *Retalick* for the succeeding nights¹.

As a counter to the mine menace, special measures were taken to reduce to the minimum all traffic and the speed at which it proceeded in the assault area; with the rigid enforcement of these regulations, casualties fell to small dimensions. Minesweeping, too, played its part. By the 3rd July nearly 500 mines, including spontaneous detonations, had been accounted for by the minesweepers and "at this date, although the threat had not been completely mastered, it was felt that the worst was probably over and that the build-up and our operations generally would develop as desired in spite of mining²."

Enemy aircraft increased their night activity generally during this period, and in addition to the minelaying by low flying aircraft, there were attacks by torpedo aircraft, composite aircraft, and occasionally flying bombs, none of which achieved any measure of success.

The shelling of "Sword" anchorage and beaches did, however, succeed in retarding the build-up in that area to some extent. By D+9 (15th June) the enemy had regained control of the east bank of the mouth of the Orne and from then on his shell and mortar fire became increasingly accurate. Counter-battery fire, L.C.G.(L)s firing close inshore and smoke screens failed to check it. H.M.S. *Bachaquero*, *Alberni* and five L.S.T. were damaged on the 15th June and the unloading of personnel ships was discontinued, these ships being moved to "Juno" area. The next day the *Locust* and some ferry craft were hit, and the drying out of L.S.T. was stopped. After a beached ammunition coaster was hit and set on fire on 23rd June, only stores coasters were accepted. The enemy's fire became still more persistent and accurate, and on 25th all M.T. ships and the remaining coasters were shifted to "Juno", and "Gold" anchorages. Ferry craft and depôt ships were the last to leave the area and on 1st July the "Sword" beaches were closed and the Naval Officer-in-Charge withdrawn³. The decision to close "Sword" beaches was not taken until it was clear that other areas could accept the consequent increase in discharge of stores and personnel over their beaches.

Activities in the English Channel during this latter half of June followed the same lines as in the first few days after the invasion, but the edge of the enemy's attacks had been blunted; the submarine and air offensives never

¹ Rear-Admiral Vian subsequently wrote to A.N.C.X.F.: "I am particularly grateful that you were able to allocate a cruiser as flagship of the Task Force Commander; separation from the Army Commander in the early stages proved no inconvenience and H.M.S. *Scylla*, commanded in an admirable manner by Captain T. M. Brownrigg, C.B.E., R.N., fulfilled all reasonable requirements.

Not the least of the *Scylla's* advantages was that, whilst able to bombard when required, she had the mobility necessary to the Task Force Commander and Staff, and was so equipped that the surface defence of the Assault area could be conducted from the Flagship." A.N.C.X.F. Report, Vol. 2, Report of N.C.E.T.F., p. 4.

² A.N.C.X.F. Report, Vol. 1, p. 17.

³ Admiral Ramsay subsequently remarked: "Although the mobile batteries in question were of small calibre and under more favourable circumstances could easily have been neutralized by gunfire without undue risk to the ships from return fire, the important lesson is considered to be that an unloading beach should not be allowed to lie on an exposed flank, but that the Army should early advance sufficiently along the coast to outrange hostile mobile guns; alternatively, the Army must take greater responsibility for counter-battery fire than they did in "Neptune," to protect the unloading beaches and anchorage." A.N.C.X.F. Report, Vol. 1, p. 65.

attained more than a nuisance value, while generally speaking the efforts of his surface forces were confined to minelaying and attempts to reinforce Cherbourg or save what he could when the fall of that port became imminent. The policy of the Allied patrols, on the other hand, became more aggressive; defence of the "Spout" and the English coast routes tended more and more to become a blockade of the German forces in their ports on the coast of France.

The somewhat unexpected immunity of the coastal routes from E-Boat attack had enabled the M.T.B. patrols in Lyme Bay to be gradually weakened by the substitution of M.L.s, the former being employed offensively, mainly in the Channel Islands area¹, where they caused great embarrassment to the German St. Malo-Channel Islands-Cherbourg traffic. The 23rd M.T.B. Flotilla inflicted casualties on enemy patrol craft as early as the 10th June, and on the 16th the 65th M.T.B. Flotilla attacked a convoy and torpedoed a minesweeper, which, however, reached St. Helier.

On the night of 18th/19th June the Germans transferred six E-Boats (the remains of their 2nd and 4th Flotillas) from Boulogne to Le Havre, and the Cherbourg Flotilla to St. Malo. The latter were plotted by H.M.S. *Stayner* off Cape de la Hague, but their interception was prevented by fire from shore batteries. The German Air Force was active that night, four attacks being made on the 17th Destroyer Flotilla to the westward of the "Spout." During the last attack H.M.S. *Onslow* was slightly damaged by a torpedo which struck her a glancing blow at 2335, 18th, but fortunately failed to explode.

From the 19th to the 22nd June the weather virtually put a stop to operations, but on the night of the 22nd/23rd enemy air activity was resumed, nine patrol craft² being unsuccessfully attacked by Ju.88's. H.M.S. *Rowley* (Lieut.-Commander F. J. Gwyn-Jones, R.N.R.) shot down two and the F.S. *L'Aventure* claimed one.

On this and succeeding nights the Commander-in-Chief, Portsmouth, stationed coastal units of the Portsmouth Command controlled by frigates north and north-west of Cherbourg to guard against evacuation; other units, controlled by the F.O.I.C., Portland, were placed to the southward of Alderney, and the Plymouth M.T.B.s operated between Jersey and St. Malo. It was not long before these measures bore fruit. On the night of 22nd/23rd a coaster and an "M"-class minesweeper were sunk, and another minesweeper was badly damaged by the 65th M.T.B. Flotilla between St. Malo and Jersey³. The following night (23rd/24th) Coastal Forces⁴ of the Portsmouth Command

¹ The 23rd, 52nd and 65th M.T.B. Flotillas (Plymouth Command). During the month of June, 23rd Flotilla operated on 10 occasions, encountering the enemy twice; the 52nd on 15 occasions, encountering the enemy three times and the 65th on 11 occasions, with two engagements. Only minor damage to craft and 13 casualties to personnel were suffered by the three flotillas in these operations.

² H.M. ships *Brissenden*, *Wensleydale*, *Tanatside*, *Londonderry*, *Beagle*, *Rowley*, F.D.T. 13, F.S. *L'Escarmouche*, *L'Aventure*.

³ This was rather an unfortunate night for the Germans. The 8th M.T.B. Flotilla moved from Ostende to Boulogne; a ground mine explosion off the latter caused damage to all the boats in the flotilla. Off Havre an E-Boat was sunk by gunfire from an unknown ship.

⁴ G.F.3 M.T.B.s 254 (Lieut. D. A. Shaw, D.S.O., R.N., S.O.) 255, 257.

G.F.4 M.T.B.s 250 (Lieut. G. H. Baker, R.N.V.R., S.O.), 249, 251.

G.F.5 M.T.B.s 693 (Lieut.-Com. D. H. E. McCowen, D.S.O., R.N.V.R., S.O.), 694, 689.

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attacked a convoy of three motor coasters escorted by four gun carriers bound from Cherbourg to Alderney, sinking one gun carrier and all three coasters¹. The M.T.B.s suffered only slight damage, though one group was under fire from shore batteries for over three hours, during which time some 200 rounds of 6-in. were fired at it. Off St. Malo, the 52nd M.T.B. Flotilla had a brush with enemy minesweepers.

On the night of 25th/26th June, dispositions were adjusted to prevent the passage of E-Boats from the Channel Islands to Le Havre. Several contacts occurred, but the weather was bad and the superior speed of the E-Boats enabled them to avoid action.

For the remainder of the month, thick weather obtained in the Channel off and on and, partly for this reason, surface contacts though frequent were usually inconclusive. A patrol vessel, however, was damaged by the 52nd M.T.B. Flotilla on 26th/27th and H.M.C. Ships *Huron* and *Eskimo* sank a minesweeper and patrol vessel to the southward of Jersey on 27th/28th.

In the Dover Command during this period few surface contacts occurred. On 26th/27th M.T.B.s 703 and 698 attacked two gun carriers, damaging one, off Cape D'Antifer; there were also brushes between M.T.B.s and E/R-Boats off Fécamp on 25th/26th, and south-west of Boulogne on 28th/29th.

Air activity was seriously hampered on nine nights by the weather; this was made up for on other nights, and during the whole period 11 enemy craft were claimed as destroyed and 25 damaged.

All this time the grim game of move and counter-move in the submarine offensive had been continuing. On 17th June the Admiralty made a policy signal directing (a) all available support groups to be employed in the Channel; (b) No. 11 Support Group to operate under the Commander-in-Chief, Portsmouth, leaving nine support groups to the Plymouth Command; (c) In addition to No. 11 Support Group, destroyers would be allocated to the Commander-in-Chief, Portsmouth, by A.N.C.X.F.

The next day (18th June) a new anti-submarine barrier was established on the line Plymouth-Triagoz (*see* Sec. 65 *ante*). The 14th Escort Group² sank a submarine, U.767, and the 3rd Escort Group attacked another north-west of Alderney, but was driven off by shore batteries before establishing a "kill." That night, the 6th, 9th and 15th Escort Groups from the Western Approaches came under the Plymouth Command. At the same time several sightings and attacks—one of which sank U.441—by aircraft of No. 19 Group to the westward of the Channel entrance indicated the long-expected arrival of the U-Boats from Norway and Germany. The newly joined escort groups were despatched to these sightings and the 12th Escort Group to the north Cornish coast. Two "S" class destroyers covered the Lizard-Scillies area.

Between 19th and 23rd June—the period of the gale—there were many aircraft sightings, but no kills. On the latter date moored mines were swept off the Eddystone; this was "disappointing in view of the efforts which had been made to prevent U-Boats approaching the Plymouth area³." Groups were redispersed to catch the minelayer on its return journey, but the main concentration was still from the French coast to Plymouth and in the Ushant area.

¹ These figures are taken from the German account. It was thought at the time that the damage had been greater.

² H.M.S. Ships, *Fame*, *Inconstant*, *Havelock*.

³ C.-in-C., Plymouth, Report on Operation "Neptune," Enclosure II, Sec. 4, p. 5.

During the night of 23rd/24th June there was considerable D/F activity in the western channel and Ushant area; groups were moved closer to Ushant than ever before. The next forenoon (24th) aircraft sightings in this area came in thick and fast and the 2nd and 15th Escort Groups were busily engaged in chasing these reports, but could not obtain a contact. The Tribals, however, who were moving south to support them, brought U.971 to the surface with four 5-charge patterns, "where she was suitably dealt with by *Haida* and *Eskimo* and 42 prisoners were taken."¹

Another submarine (U.269) was sunk by H.M.S. *Bickerton* (S.O. 5th Escort Group) at the eastern end of the Channel early on the 25th; 42 survivors were picked up. The *Bickerton* proceeded to Plymouth to land her prisoners; whilst she was away from the group the *Goodson* (the next Senior Officer) was torpedoed and had her stern blown off; she was subsequently towed to Portland by the *Bligh*. The 1st Escort Group which had arrived in the Plymouth Command from the Western Approaches the day before was ordered to the eastward to operate with the depleted 5th Escort Group and at 2200 that evening the *Affleck* and *Balfour* heavily attacked a contact and effected a "kill" (U.1191).

Thick weather on 25th and 26th June seriously interfered with flying and on the 27th the first incident which could fairly be attributed to U-Boat activity occurred in the "Spout" area, when H.M.S. *Pink* while escorting an outward bound convoy was torpedoed some 20 miles northeast of Cape Barfleur (Lat. 49° 48' N., Long. 00° 50' W.). H.M.S. *Rochester* (Senior Officer of the escort) attacked an A/S contact two miles on the *Pink's* port beam with inconclusive results; the *Pink* was successfully towed to Portsmouth.

During the next few days the U-Boats had some success in the "Spout." At 2310, 28th June, the troopship *Maid of Orleans* returning to Portsmouth in Convoy F.X.P.18 was torpedoed and sunk about 35 miles to the southward of Selsey Bill (approximately Lat. 50° 08' N., Long. 0° 40' W.). The next afternoon (29th June) four Liberty ships in convoy E.C.M.17 were torpedoed at 1545 some five miles to the westward of this position (Lat. 50° 07' N., Long. 0° 48' W.). Three of them (*James A. Farrel*, *James A. Treutlan* and *H. G. Blasdel*) were towed by tugs to the Solent; the fourth (*Edward M. House*) continued with the convoy. Anti-submarine search of the vicinity by the 11th Escort Group and other ships failed to obtain results. Less than three hours later, at 1825, S.S. *Empire Portia* in convoy F.M.T.22 was torpedoed in position Lat. 50° 34' N., Long. 0° 35' W.; she was successfully towed to the Solent by L.S.T. 416.

This (29th June) was the most successful day enjoyed by the U-Boats, but the scales were too heavily weighted against them and it was not long before yet another—the twelfth since the start of the operation—fell a victim to the Allies. This was U.988, which was damaged that night by a Liberator to the south-west of the Start and finished off by the 3rd Escort Group² the next forenoon (30th June).

During the succeeding months the U-Boats continued their efforts, but their successes were few and far between, while their losses were considerable³.

¹ C.-in-C. Plymouth. Report on operation "Neptune." Enclosure II, Sec. 4, p. 5.

² H.M.S. *Essington*, *Duckworth*, *Dommett* and *Cooke*.

³ See App. "L." German Submarine Losses, June–September, 1944.

Thus despite all that the enemy could do, the build-up went steadily forward, and as early as the 25th June (D+19) Admiral Krancke, after quoting the unloading figures for the past 48 hours as obtained by the German Radio Intercept Service, was writing "The amounts quoted represent many times the reserves of material and men moved up to the front by us, and offer a clear picture of the enemy's superiority and of the advantage of seaborne supplies, given sea and air superiority¹."

That this opinion was amply borne out by the event few will deny; but the Admiral omits mention of one vital factor without which sea and air superiority would have been as "sounding brass and tinkling cymbals"—the tremendous part played by the Mercantile Marine.

If little specific mention of this has been made in the foregoing narrative, it is because the Merchant Navy carried out its duties with such regular efficiency that they tended to be taken for granted. But it should not be forgotten that all risks of war and weather, calling for a high degree of courage and seaman-like skill, were cheerfully accepted over a long period of months and the armies were never embarrassed for want of reinforcements and supplies; in the words of Rear-Admiral Sir Philip Vian—"From D-day onwards the Merchant Navy . . . proved its staunchness and fidelity, in whatever circumstances²."

69. Bombardment of Cherbourg, 25th June, 1944.

(Plan 13)

Meanwhile, the VII U.S. Corps had advanced on Cherbourg on a three-divisional front, moving through Montebourg, Valognes and Bricquebec. On 22nd June the reduction of the fortress started, helped by systematic bombing.

General Bradley had asked for naval bombardment of the defences of Cherbourg to synchronize with his final assault by land. A task force consisting of three battleships, *Texas*, *Arkansas*, *Nevada* and four cruisers *Tuscaloosa*, *Quincy*, *Glasgow*, *Enterprise* with screening destroyers and two minesweeping flotillas was formed under the command of Rear-Admiral M. L. Deyo, U.S.N. (C.T.F. 129) and assembled at Portland between 21st and 22nd June for planning and briefing³.

The army requirements were for the Navy (a) to close in to the coast and neutralize the many and very powerful shore batteries; then (b) to deliver heavy fire against artillery and protected German resistance units to destroy their effectiveness, while the VII Corps left the high ground southward of the city and stormed the inner defences.

The original plan provided for a preliminary bombardment at a range of 28,000 yards to neutralize the long-range batteries, after which ships were to close in to about 14,000 yards and engage targets designated by the army.

¹ War Diary of Naval Group Command, West, 1st-30th June, 1944.

² A.N.C.X.F. Report, Vol. 2, Report by N.C.E.T.F., p. 4.

It was not only in the waters of the assault area and the "Spout" that merchant ships were exposed to danger. Wherever they were, risks from U-Boat, mines and air had to be faced. In addition, those passing Dover Straits were frequently shelled by enemy cross-channel batteries. These batteries were responsible for the destruction of two ships—S.S. *Sambut* on 6th June and S.S. *Empire Lough* on 26th—and damaged three other ships in the course of the month.

³ Rear-Admiral Deyo was prevented from personal contact with the Army by the gale, but he had discussed the problem with General Collins previously and knew his desires.

In order to carry out this plan, Task Force 129¹ was organized as follows :—

Bombardment Group No. 1

(Rear-Admiral Deyo, U.S.N.)

U.S.S. *Tuscaloosa* (Flag)

(9—8-in., 8—5-in.).

U.S.S. *Quincy* (9—8-in., 12—5-in.).

U.S.S. *Nevada* (10—14-in., 16—5-in.).

H.M.S. *Glasgow* (12—6-in.).

H.M.S. *Enterprise* (6—6-in.).

Screen.

U.S.S. *Ellyson*.

U.S.S. *Hambleton*.

U.S.S. *Rodman*.

U.S.S. *Emmons*.

U.S.S. *Murphy*.

U.S.S. *Gherardi*.

Minesweeping Unit No. 1.

(Commander Thompson, R.N.).

9th M.S. *Flotilla*.

H.M.S. *Sidmouth* (S.O.).

H.M.S. *Tenby*.

H.M.S. *Bridport*.

H.M.S. *Bangor*.

H.M.S. *Blackpool*.

H.M.S. *Boston*.

H.M.S. *Bridlington*.

H.M.S. *Eastbourne*.

H.M.S. *Bryther* (Danlayer).

H.M.S. *Ijuin* (Danlayer).

H.M.S. *Dalmatia* (Danlayer).

H.M.S. *Sigma* (Danlayer).

4 Motor Launches.

159th M.S. *Flotilla*.

B.Y.M.S. 2032, 2052, 2055,

2070, 2071, 2157, 2173,

2211.

Bombardment Group No. 2

(Rear-Admiral Bryant, U.S.N.)

U.S.S. *Texas* (Flag)

(10—14-in., 6—5-in.).

U.S.S. *Arkansas* (12—12-in., 6—5-in.).

Screen.

U.S.S. *Barton*.

U.S.S. *O'Brien*.

U.S.S. *Laffey*.

U.S.S. *Hobson*.

U.S.S. *Plunkett*.

Minesweeping Unit No. 2.

(Commander Planter, U.S.N.).

"A" Squadron.

U.S.S. *Pheasant* (S.O.).

U.S.S. *Auk*.

U.S.S. *Broadbill*.

U.S.S. *Chickadee*.

U.S.S. *Staff*.

U.S.S. *Raven*.

U.S.S. *Swift*.

U.S.S. *Threat*.

H.M.S. *Thunder* (Danlayer).

4 Motor Launches.

Group 1 was to carry out the preliminary bombardment from a position to the north and west of Cherbourg at ranges of about 25,000 yards (*see* Plan 13, Fire Support Area No. 1) ; Group 2 from a position to the north-north-eastward of Cape Barfleur at about 20,000 yards range (Fire Support Area No. 2). After 80 minutes' bombardment from these positions, both groups were to proceed to Fire Support Area No. 3 and engage targets as required by the army at ranges of 12,000—14,000 yards. Fire support areas and approach channels were to be swept by the appropriate minesweeping unit.

¹ Task Force 129 also included port and harbour clearance groups, major captured port groups, hydrographic groups, etc., but these did not proceed to sea for the bombardment.

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Task Force 129 sailed from Portland during the night of 24th/25th June, speed being adjusted so that the two groups—after carrying out their long range bombardments—would reach Fire Support Area No. 3 at noon. At the request of the Army, however, the long range bombardments were cancelled and the bombarding ships moved in to their close range positions before opening fire.

At 1155 the minesweepers of Unit 1 made their turn to sweep Fire Support Area 3, closely followed by the bombarding ships of Group 1. As they entered the area, they came under heavy fire; the German batteries had evidently been waiting until they were well within range. The destroyers, screening on the flanks, made smoke, but the enemy fire increased and after sweeping three miles (half the intended distance) the minesweepers were forced to withdraw to the northward. No mines had been exploded and this encouraged the belief that none had been laid; in any case manœuvring room was a necessity and "the *Nevada* cut loose at 1238 and manœuvred to the northward of the swept water. Soon *Glasgow* and *Enterprise* did likewise, followed by *Tuscaloosa* and *Quincy*. From then on the ships, manœuvring independently, steamed back and forth partly in and partly somewhat to the northward of Fire Support Area 3, generally supporting each other and conforming as nearly as circumstances admitted to the plan. It was, of course, necessary to cease fire at intervals on Army missions to do counter-battery work when the enemy fire became too troublesome as our ships were all either being hit or very closely missed¹."

Group 2 also came under very heavy fire soon after entering the channel to Fire Support Area 3 and was never able to join up with Group 1. The *Arkansas* engaged targets desired by the Army, while the *Texas* dealt with No. 2 Battery (4—280 mm. guns), which was particularly troublesome and at Rear-Admiral Bryant's request was also engaged by the *Quincy*. The *Texas* was hit at about 1308 and had her ship control communications in the pilot house carried away, and by 1315 the *Barton*, *Laffey* and *O'Brien* had also been damaged, "as they gallantly engaged the batteries¹."

At 1320 Rear-Admiral Deyo signalled to the Commanding General, VII Corps, enquiring whether further assistance was required. The General replied that he would like the bombardment to continue till 1500—a request with which the Admiral had no hesitation in complying, since the General was aware of his instructions and knew the situation ashore. The enemy fire was still accurate and heavy; at 1342 the *Glasgow* received two shell hits and a near miss which damaged her port hangar and upper works. The expedient of one or two ships closing a ship being straddled was adopted, thus offering a multiplicity of targets; this appeared to disconcert the enemy gunners. "The destroyers . . . were most alert in observing ships under heavy fire and interposed, either laying smoke or offering to do so. They worked in boldly towards the coast and engaged by direct fire batteries seen to be firing¹."

Meanwhile, although some of the batteries could not be silenced, the bombardment was achieving a large measure of success. A good deal of haze hung

¹ A.N.C.X.F. Report, Vol. 3, Report by Rear-Admiral Deyo, U.S.N., p. 6.

over the land and this, with the dust and smoke, rendered observation by aircraft and shore fire control parties very difficult ; nevertheless, the Army stated that out of 21 missions requested 19 were successfully completed¹.

At 1500 the signal was made to withdraw, and the bombarding groups retired independently, Group 1 by channel No. 1 and Group 2 to the north-eastward. Of the seven heavy ships in the operation, all but one had been either hit or had received fragments on board ; of the 11 destroyers, three had been hit and all others narrowly missed². Casualties were light, amounting to 14 killed and 38 wounded for the whole task force. The minesweepers in both areas, which "having performed a courageous task had been forced to retire to the northward out of range³", were released at the same time.

All fire actually ceased at 1540, the *Tuscaloosa* completing a mission with shore fire control party at that time, and Group 1 (except the *Enterprise* which proceeded to Portsmouth for ammunition) anchored in Portland at 2000, followed by Group 2 an hour and a half later. At 2115 the Task Force Commander and all Captains of Group 1 "spliced the main brace" on board H.M.S. *Glasgow*.

The following day (26th June, 1944 : D+20) Cherbourg fell to General Bradley's troops, the formal surrender being completed on the 27th⁴.

¹ Ammunition expended by U.S. ships for all purposes :—

14-in./45 H.C. . .	318 rounds.	5-in. A.A. common . .	1,763 rounds.
12-in. . .	58 rounds.	5-in. White phosphorus . .	78 rounds.
8-in. A.P. . .	11 rounds.	5-in. Common . .	135 rounds.
8-in. H.C. . .	156 rounds.	4-in. Common . .	42 rounds.
6-in. . .	429 rounds.		

Rear-Admiral Deyo remarked that ships had been particularly warned to conserve ammunition for future employment and to preserve the life of the guns. "Considering the hornet's nest that was encountered, it is probable we should have done better if we had used more ammunition." A.N.C.X.F. Report, Vol. 3, Report by Rear-Admiral Deyo, U.S.N., p. 7.

² Principal damage was as follows :—

U.S.S. *Texas*—about 1308—one hit on top of conning tower, one dud in Warrant Officer's mess. Inside pilot house, deck of navigating bridge blown upwards, wrecking all instruments and wiring.

H.M.S. *Glasgow*—about 1342—two shell hits and one near miss caused holes and distortion of framing in port hangar, after superstructure and Captain's after cabin. One hole 10 ft. square in hangar, splinter holes in funnels, bulkheads and decks ; extensive damage to lighting circuits ; H.A.(A.A.) director and T.D.Y. equipment damaged.

U.S.S. *O'Brien*—at 1253—205-mm. shell struck after corner of bridge and ricocheted into starboard forward 40-mm. gun mount, where it burst, causing extensive damage.

U.S.S. *Barton*—about 1315—8-in. dud hit after diesel engine room, cutting degaussing coils ; side holed 1 ft. above water-line.

U.S.S. *Laffey*—1316—one dud hit below anchor, cutting degaussing cable, and opening hole in side 1 ft. by 4 ft. long.

³ A.N.C.X.F. Report, Vol. 3, Report by Rear-Admiral Deyo, U.S.N., p. 6.

⁴ The German Garrison Commander, Major-General von Schlieben, and the Naval Commander, Sea Defence, Rear-Admiral Hennecker, were captured at Naval Headquarters in the afternoon of the 26th, and (despite having previously exacted no-surrender pledges from their men) gave themselves up to the Colonel Commanding the U.S.A. Assaulting Forces and Captain Hargreaves-Heap, R.M., of No. 30 Assault Unit. The arsenal held out till next morning (27th). Forces outside Cherbourg in the north-west of the peninsula continued to resist till 1st July, when they were rounded up by the 9th U.S. Division.

No time was lost in commencing a reconnaissance of the port and deciding upon salvage operations. Severe damage had been done to the docks and the arsenal, whilst the entire anchorage had been heavily mined. All types of mines were swept during the next few days—moored contact, ground contact, fired on a snag line, moored magnetic, ground magnetic and ground acoustic. A great number of ships had been sunk in the harbour and full scope was given to the genius of Commodore Sullivan, U.S.N., in effecting the clearance of the port, which in the event took nearly 90 days.

The capture of Cherbourg enabled Admiral Ramsay to dispense with some of his bombarding ships and landing craft for the release of which the Admiralty and Commander-in-Chief U.S. Navy had been pressing since about 20th June. Some of these were required for Operation "Anvil" (later "Dragoon"—landing in the south of France) and some for service in the Far East. Vessels were released progressively as they could be spared, but previous experience had shown Admiral Ramsay the danger of withdrawing ships from an area before an operation had fully succeeded and he was careful not to agree to the release of ships before he was really satisfied that they were no longer necessary.

70. Withdrawal of Task and Assault Force Commanders

During the last few days of June, the British and U.S. Assault Force Commanders were successively withdrawn from the assault area, as conditions in their respective sectors became re-established.

On 24th June, Rear-Admiral Rivett-Carnac established his headquarters ashore at Courseulles as F.O.B.A.A. and two days later Rear-Admiral Wilkes similarly hoisted his flag as F.O. West. Rear-Admiral Sir Philip Vian left the British assault area on 30th June, when the command was assumed by Rear-Admiral Rivett-Carnac and Rear-Admiral Kirk withdrew from the U.S. area on 3rd July.

The withdrawal of all these officers and the transfer of the two naval commands to the shore marked the stabilization of the naval position in the assault area and the conclusion of the first phase in the capture of the lodgement area by our armies. This was the official end of Operation "Neptune." The build-up over the Normandy beaches continued for many weeks but "Neptune" became merged in the larger operation—"Overlord"—of which it had been the naval preliminary. It was a source of particular satisfaction to Admiral Ramsay at this juncture, therefore, that the Chief Administrative Officer¹ to the Supreme Commander was able to report at a meeting held on 1st July that the "Commanders in the field had complete freedom of action so far as the administrative arrangements were concerned," thereby confirming the view that the Navy had in fact met the Army's requirements for their reinforcement and maintenance².

On 5th July, 1944 (D+29) the millionth man was landed in France.

¹ General Gale, U.S.A. *Sir H.M. Gale.*

² A.N.C.X.F. Report, Vol. 1, p. 18.

71. Conclusion

It is beyond the scope of this narrative to touch on the large number of comments on Operation "Neptune" and recommendations contained in the reports of the Naval Commander-in-Chief and the Task and Assault Force Commanders.

It is perhaps permissible, however, to emphasize the one factor—so often unattainable or disregarded in the past—without which the most ingenious plans, the amplest equipment and the utmost skill and bravery would have been of no avail, namely, the spirit of co-operation and the good relations which prevailed between the Allied Nations and also between the many Service and Civil organizations involved. That there were differences of opinion and outlook in an operation of such magnitude and complexity was inevitable, but these differences were frankly recognized and faced as they occurred, and once a decision had been made, it was loyally accepted by "all hands for the good of the side."

This happy state of affairs—so creditable to all concerned—must be ascribed in the first place to the Supreme Commander, as was recognized by Admiral Ramsay who concluded his report on the operation to General Eisenhower with the words: "I cannot close this letter without expressing my deepest admiration for the manner in which the efforts of the many Commands of all Services and of both our countries were directed and co-ordinated by yourself as Supreme Commander. I deem it a very great honour to have commanded the Allied naval forces in this great operation under your inspiring leadership, which more perhaps than anything else has been responsible for the success achieved."

That success stands unparalleled in history and many years will pass before its full and ultimate consequences stand revealed, but certain it is that a great page of history turned on that summer day in June when H-hour struck, the guns of the Allies opened and

"There came Neptunus on his way
That hath the sea in governance."

¹ A.N.C.XF.. Report, Vol. 1, p. 19.